



March 26, 2014

Mr. Jeff Gore
U.S. Environmental Protection Agency, Region V
77 West Jackson Boulevard, HSRL-6J
Chicago, Illinois 60604

RE: Year #14 Report of Groundwater Quality for the Albion-Sheridan Township Landfill;
ALB039.100.0009

Dear Mr. Gore:

On behalf of the Decker Manufacturing Corporation and the City of Albion, Michigan (Settling O&M Defendants), Hull & Associates, Inc. (Hull), developed this report to document the findings of sampling activities completed during the groundwater monitoring period from January 2013 through December 2013 at the Albion-Sheridan Township Landfill (Site). Provided in this report are the hydrologic and laboratory analytical data compiled for Year #14 groundwater sampling event conducted in accordance with the approved O&M Plan developed by SECOR International Incorporated (February 1999), as modified by the recommendation contained within the U.S. EPA's "Second Five-Year Review Report" for the Site. This report includes the results of the analysis of the annual parameter list. The collected groundwater samples were also analyzed for total metals only; analysis for dissolved metals has been discontinued. The landfill inspections completed in January 2013 and July 2013 are also discussed in the attached report.

Should you have any questions or comments, please contact me at your convenience.

Sincerely,

William G. Petruzzi, P.G.
Principal

WGP/sgd/jab

Attachments

ct: Kevin Markovich-City Engineer, City of Albion (w/attachment)
Bernie Konkle, Decker Manufacturing Corp. (w/attachment)
Mary Schafer, Michigan Department of Environmental Quality (w/attachment)
Jack Grey, Corning Incorporated (w/attachment)
Eugene E. Smay and Melvin G. Moseley Jr., Warner, Norcross & Judd L.L.P. (w/attachment)
Ron Sandburg, Cooper Industries, Inc. (w/attachment)
Michael T. Coonfare, Hull & Associates, Inc.
Ryan Murphy, Hull & Associates, Inc.

ANNUAL REPORT OF GROUNDWATER QUALITY

FOR THE:
**ALBION-SHERIDAN TOWNSHIP LANDFILL
SHERIDAN TOWNSHIP, CALHOUN COUNTY, MICHIGAN**

PREPARED FOR:
**CITY OF ALBION
112 WEST CASS STREET
ALBION, MICHIGAN 49224**

**DECKER MANUFACTURING CORPORATION
703 NORTH CLARK STREET
ALBION, MICHIGAN 49224**

PREPARED BY:
**HULL & ASSOCIATES, INC.
3401 GLENDALE AVENUE
SUITE 300
TOLEDO, OHIO 43614**

**SAMPLE DATE: NOVEMBER 2013
REPORT DATE: MARCH 2014**



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1.0 INTRODUCTION

On behalf of Decker Manufacturing Corporation and the City of Albion (Settling O&M Defendants), this report was prepared by Hull & Associates, Inc. (Hull) to comply with monitoring and reporting requirements established in the approved February 1999 Operation and Maintenance Plan (O&M Plan) for the Albion-Sheridan Township Landfill (Site) as amended by the U.S. EPA's "Second Five-Year Review Report" for the Site. The information contained in this report represents the annual groundwater sampling event identified as monitoring Year #14 and includes the analysis of parameters required for the annual groundwater sampling program. U.S. EPA's "Second Five-Year Review Report" included the requirement to analyze for total metals as opposed to dissolved metals. The "Second Five-Year Review Report" was submitted by U.S. EPA in August 2007 and the resulting revisions to the sampling and analysis methodologies were implemented in the November 2007 sampling event. Therefore, total arsenic values have only been collected during the 2007 through 2013 sampling events. Analysis for dissolved metals was discontinued beginning with the 2010 sampling event. Please note that the "Third Five-Year Review Report" was completed by U.S. EPA in August 2012. No additional recommendations were identified by U.S. EPA in relation to sampling and analysis methodologies. The recommendations and follow-up actions identified by U.S. EPA in the "Third Five-Year Review Report" are discussed in Section 4 of this report.

Field activities were completed in Monitoring Year #14 in accordance with the O&M Plan as amended by the "Second Five-Year Review Report" for the Site. These activities involved the collection of water levels, and the sampling of eighteen monitoring wells screened in the shallow bedrock, sand and gravel, and deep bedrock units and one residential well in November 2013. Landfill inspections were completed in January 2013 and July 2013.

2.0 GROUNDWATER MONITORING

2.1 Sampling and Analysis

The wells required to be monitored on an annual basis consist of two residential wells (RW-04, and RW-06) and eighteen shallow bedrock, sand and gravel, and deep bedrock monitoring wells (MW-02SB, MW-03SBA, MW-04SB through MW-09SB, MW-15SB, MW-16SB; MW-02SG, MW-04SG, MW-05SG, MW-07SG, MW-10SG; MW-09DB, MW-16DB, and MW-17B (formerly known as residential well RW-07)). Figure 1 illustrates the location of groundwater monitoring wells on or near the Site. For the current sampling event, a sample was not collected from residential well RW-06 as the resident of the property was not available to grant access. The U.S. EPA was immediately notified that access to the residential well was not available. The resident will be notified in advance for future sampling events in an attempt to schedule access.

Groundwater samples were collected by a representative of Hull and were analyzed by TestAmerica Inc. of Canton, Ohio. During the November 11-12, 2013 (current) sampling event, groundwater samples were collected from eighteen shallow bedrock, sand and gravel, and deep bedrock monitoring wells and one residential well. Additionally, three duplicate samples were collected from randomly selected monitoring wells, MW-07SB, MW-07SG, and RW04. Two field blanks and one trip blank were also analyzed for quality assurance/quality control purposes. The groundwater monitoring wells were purged and sampled using low-flow sampling procedures as requested by U.S. EPA, with the exception of monitoring well MW-10SG for the current event. Conditions in the vicinity of MW-10SG prevented the sampler from transporting low-flow equipment to the well. Additionally, the residential well RW-04 sample was collected from the faucet.

2.2 Laboratory Analytical Data

The laboratory analytical and quality control reports developed by TestAmerica for the current sampling event are provided in Appendix A. Copies of the Chain-of-Custody and Request for Analysis forms are also provided in Appendix A. Included in Appendix B are copies of the groundwater monitoring well Field Data Sheets, Calibration Record Form, and Site Inspection Forms.

Discussions with U.S. EPA confirmed that third party validation was no longer required for the analytical data. However, the CLP-like analytical and quality control report for each sampling event will continue to be maintained in case third party data validation should later be required.

Groundwater samples collected from monitoring wells screened in the shallow bedrock, sand and gravel, and deep bedrock units and the residential monitoring well were analyzed for the annual parameter list

as required in Section 3.2.3 of the O&M Plan. This parameter list is given on Tables 7-4 and 7-5 of the Remedial Action Quality Assurance Project Plan (Woodward-Clyde Consultants, 1996) and includes the Target Analyte List (TAL) inorganics and Target Compound List (TCL) organics for all groundwater monitoring wells and residential wells included in the monitoring program at the Site. U.S. EPA's "Second Five-Year Review Report" included the requirement to analyze for total metals as opposed to dissolved metals. Analysis for dissolved metals was discontinued beginning with the 2010 sampling event.

In accordance with the approved O&M plan, the groundwater samples historically collected for metals were filtered in the field and analyzed to determine the dissolved phase concentration of the metals. In 2007, U.S. EPA stated that the groundwater sampling program should be modified to collect unfiltered groundwater samples using a low-flow sampling technique. Hull expressed concern that modifying the sampling protocols and changing from dissolved to total metal analysis could comprise the validity of the previous seven years of data. Based on these concerns, dissolved and total metals samples were collected during the 2007, 2008, and 2009 sampling events to allow for the comparison of total and dissolved metal concentrations. As the results for total and dissolved metals were found to be comparable, only total metals have been analyzed since the 2010 event.

2.3 Analytical Data Review

Tables 1 through 18 provide summaries of the laboratory analytical data for the inorganic and organic parameters compiled for each of the monitoring wells throughout the monitoring period. Tables 19 and 20 provide a summary of the laboratory analytical results for the residential wells throughout the monitoring period. As previously mentioned, a sample was unable to be collected from residential well RW-06 for the current event.

2.3.1 Groundwater Monitoring Wells

The analytical results for the current groundwater sampling event indicate that multiple parameters were reported above their respective analytical laboratory practical quantitation limits (PQLs). Please refer to Tables 1-18 for a summary of the analytical results. Of the parameters that are required to be analyzed on an annual basis, the following parameters were reported above the PQL:

- Ammonia-nitrogen was detected in 11 of the 18 wells, including MW-10SG, MW-15SB, MW-16DB, MW-16SB, MW-17B, MW-03SBA, MW-04SB, MW-04SG, MW-06SB, MW-07SG, MW-09SB; along with MW-07SG duplicate. The ammonia-nitrogen concentrations reported above the laboratory PQL range from 0.25 mg/L at MW-3SBA to 13.0 mg/L at MW-04SB.
- Total aluminum was detected in 4 of the 18 wells, including MW-04SG, MW-06SB, MW-08SB and MW-10SG; along with field blank 1. The total aluminum concentrations

reported above the laboratory PQL range from 0.058 mg/L for MW-08SB to 1.3 mg/L at MW-10SG.

- Total arsenic was reported above the laboratory PQL in 4 of the 18 wells, including MW-04SB, MW-04SG, MW-07SG and MW-15SB and was reported at 0.006 mg/L, 0.024 mg/L, 0.005 mg/L and 0.074 mg/L, respectively.
- Total cobalt was detected in 1 of the 18 wells, MW-07SG; along with MW-07SG duplicate. Total cobalt was reported at 0.0026 mg/L for both samples.
- Total manganese was detected in all wells except MW-2SG and MW-05SB. The reported concentrations of total manganese ranged from 0.018 mg/L for the MW-07SB duplicate sample to 0.740 mg/L for the MW-07SG duplicate sample.
- Total nickel was detected in 2 of the 18 wells, including MW-04SB and MW-07SG; along with MW-07SG duplicate. Total nickel concentrations were reported for MW-04SB, MW-07SG, and the MW-07SG duplicate sample at 0.0038 mg/L, 0.0034 mg/L, and 0.0033 mg/L, respectively.

The approved O&M Plan identifies 0.05 mg/L as the compliance limit for arsenic in groundwater at the Site, which was the established U.S. EPA primary DWS for arsenic at the time the O&M Plan was developed. However, the currently established primary DWS for arsenic of 0.01 mg/L is being used as the groundwater compliance limit for arsenic. Total arsenic values reported above the PQL during the current sampling event exceed the primary DWS at monitoring wells MW-15SB and MW-4SG but not at monitoring wells MW-04SB or MW-07SG. Note that total arsenic was not reported at or above the PQL in any other monitoring wells during the current event. As required in Section 3.2.10 of the O&M Plan, an arsenic isoconcentration map with spatial distributions (using total metal values) in groundwater for the shallow bedrock unit is illustrated on Plate 1.

Time-series plots, included in Appendix C, were developed for aluminum, ammonia-nitrogen, arsenic, and manganese for monitoring wells at which these parameters have often been reported above the PQL. Note that the time-series plots represent both the total and dissolved aluminum, arsenic, and manganese concentrations, since there are only seven monitoring events for total metals to date. Where data was reported below the laboratory PQL, a value of half the laboratory PQL was used to plot the data. As shown on the time-series plots, parameter concentrations for aluminum, ammonia-nitrogen, arsenic, and manganese have remained relatively stable over the monitoring period in most wells.

Michigan groundwater cleanup criteria were exceeded at groundwater monitoring wells for arsenic (0.01 mg/L) in MW-04SG and MW-15SB, ammonia (10 mg/L) in MW-04SB, aluminum (0.05 mg/L) in MW-04SG, MW-06SB, MW-08SB, and MW-10SG, and manganese (0.05 mg/L) in MW-02SB, MW-03SBA, MW-04SG, MW-05SG, MW-06SB, MW-07SG, MW-09DB, MW-09SB, MW-10SG, MW-15SB, MW-16SB, and MW-17B. U.S. EPA primary drinking water standards (DWS) are not established for ammonia,

aluminum, cobalt, manganese, or nickel. Secondary U.S. EPA DWS are established for aluminum (0.05 to 0.2 mg/L) and manganese (0.05 mg/L) which are non-enforceable federal guidelines regarding cosmetic and/or aesthetic effects of drinking water.

2.3.2 Residential Wells

The analytical results from the current groundwater sampling event indicate that only one annual parameter was reported at or above the PQL for residential well RW-04: total manganese was reported at 0.067 mg/L (original sample) and 0.077 mg/L (duplicate sample). Currently, manganese does not have an established primary DWS, however, the manganese values reported (0.067 mg/L and 0.077 mg/L) slightly exceed the Michigan standard groundwater cleanup criteria of 0.050 mg/L and the U.S. EPA secondary DWS also equal to 0.05 mg/L which as noted above are non-enforceable federal guidelines regarding cosmetic and/or aesthetic effects of drinking water. As previously discussed, access to residential well RW-06 was not available, therefore no sample was collected.

A review of the sampling results for residential well RW-04 indicate that concentrations have remained relatively stable over time, and that the data points for total metals are similar to the previous results for dissolved metals.

Time-series plots, included in Appendix C, were developed for ammonia-nitrogen and manganese in residential monitoring well RW-04. Note that the time-series plots represent both the total and dissolved manganese concentrations since there are only seven monitoring events for total metals. Where data was reported below the laboratory PQL, a value of half the laboratory PQL was used to plot the data. As shown on the time-series plots, concentrations for ammonia-nitrogen and manganese have remained relatively stable in RW-04 over the monitoring period.

2.4 Groundwater Flow

On November 11, 2013, static water elevations were obtained from monitoring wells screened in the shallow bedrock unit. Plate 2 is a potentiometric surface map constructed for the shallow bedrock unit beneath the Site. Groundwater was determined to flow to the southwest at a gradient of approximately 0.002 ft/ft. Table 21 includes a summary of groundwater elevation data collected throughout the monitoring period.

3.0 LANDFILL INSPECTIONS

Landfill inspections were completed on January 24, 2013 and July 16, 2013 by Michael Charchol, Hull Senior Technician. Weather conditions during the January 24, 2013 inspection were clear with an average temperature of 9° F. Based on this inspection, the landfill cap and surface drainage system are apparently functioning as intended. All of the well pads were covered by snow during this inspection.

Weather conditions during the July 16, 2013 inspection were clear with an average temperature of 85° F. Based on this inspection, the landfill cap and surface drainage system are apparently functioning as intended. The monitoring well system is currently in good condition; however most of the well pads were covered by heavy vegetation. A large portion of the fence was also covered by heavy vegetation, making some parts inaccessible. Some of the warning signs at the site are faded although the sign at the entrance is clearly legible.

There were no maintenance activities completed in 2013.

4.0 INSTITUTIONAL CONTROLS

An institutional control study was completed by Hull in the spring of 2007 for the Site. The conclusions of the study were provided in an April 2, 2007 letter report to the U.S. EPA (Hull document # ALB037.100.0002.DOC). At U.S. EPA's request, this section has been added to the annual report to provide an update to this study and discuss any changes that may have occurred during the reporting year. No changes were identified for the Site or adjacent properties with respect to institutional controls. Please note that the "Third Five-Year Review Report" was completed by U.S. EPA in August 2012. In the "Third Five-Year Review Report", U.S. EPA identified the following recommendations and follow-up actions:

1. Continue to monitor the trend of reduced arsenic levels over the next five years, and
2. U.S. EPA will be working with potentially responsible parties (PRPs), Calhoun County, and the Michigan Department of Environmental Quality (MDEQ) to ensure institutional controls in the form of restrictive covenant(s) for property parcel(s) owned by Calhoun County.

The property ownership for parcels 362-036-00 and 362-045-00 is continuing to be evaluated by the Calhoun County Treasurers Office/ Land Bank Authority. At this time, Calhoun County is believed to be the owner of these parcels.

5.0 SUMMARY

The information in this report of groundwater quality is provided to comply with conditions stated in the approved O&M Plan developed by SECOR International Incorporated (February 1999); amended by the "Second Five-Year Review Report" for the Site.

All sampling and analysis activities were completed in accordance with the O&M Plan as amended by the "Second Five-Year Review Report" for the Site which required the analysis of total metals as opposed to dissolved metals. This report presents the results of analysis of the annual parameter list. As stated above, none of the annual parameters were reported at or above the laboratory PQL in groundwater with the exception of ammonia-nitrogen, aluminum, arsenic, cobalt, manganese, and nickel. Also, only ammonia-nitrogen and manganese were reported above the PQL in the residential well. Arsenic slightly exceeds the established primary DWS in only two of the nineteen monitoring points and was reported at values similar to prior sampling events. As previously discussed, Michigan groundwater cleanup criteria were exceeded at certain groundwater monitoring wells for arsenic, ammonia, aluminum and manganese, and for residential well RW-04 for manganese. There are no U.S. EPA primary DWS established for ammonia, total aluminum, and total manganese.

TABLES

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLEANALYTICAL SUMMARY TABLE
MONITORING WELL MW-02SE

PARAMETER	UNITS	10/27/99	01/25/00	04/19/00	07/20/00	10/24/00	10/24/00#	01/25/01	10/24/01	10/29/02	10/09/03	10/21/04	1/11/06	09/27/06	09/27/06#	11/26/07	10/07/08	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Quarterly Parameters																						
Nitrogen, Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	<0.05	0.141 ^B	0.053	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Annual Parameters																						
Aluminum, Dissolved	mg/L	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	< 0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0972	0.0747	0.0307	0.0131	0.0231	0.054 ^B	<0.050 ^B
Antimony, Dissolved	mg/L	-	-	-	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	-	-	-	-	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	0.0016	<0.001
Manganese, Dissolved	mg/L	-	-	-	-	0.19	0.195	-	<0.02	0.158	0.047	<0.02	0.195	0.188	0.188	0.215	0.173	0.197	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.238	0.24	0.212	0.233	0.236	0.28	0.36
Nickel, Dissolved	mg/L	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.007	<0.007	<0.005	< 0.006	<0.0055	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.007	< 0.006	<0.006	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	-	-	-	-	<5	<5	-	<5	<5	<5	<5	<5	<1	<1	<1	< 1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	-	-	-	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	< 1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	-	-	-	-	<1	<1	-	<1	<1	<1	<1	<1	<0.02	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.029	<0.011
Five Year Parameters																						
TAL Inorganics																						
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	90	-	-	-	-	64.5	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	0.0526	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-	60.1	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	0.0483</				

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed. Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 2

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-025G**

PARAMETER	UNITS	10/24/00	10/24/01	10/29/02	10/09/03	10/21/04	1/11/06	09/27/06	11/26/07	10/07/08	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Annual Parameters															
Nitrogen, Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	<0.05	0.207 ^b	0.058	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	<0.05	0.119	0.0181	0.034	<0.02	<0.05 ^b	<0.05 ^b
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.038	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	< 0.01	<0.01	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.0107	0.024	<0.01	<0.01	<0.01	<0.005	<0.005
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	< 1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	< 1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.028	<0.011
Five Year Parameters															
TAL Inorganics															
Chloride	mg/L	-	-	-	-	-	9	-	-	-	4.1	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	2.2	-	-	-	0.95	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	29	-	-	-	22.5	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	0.0229	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	101	-	-	-	75	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	<0.0002	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	23.4	-	-	-	20.2	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	26.5	-	-	-	24.2	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	7.3	-	-	-	5.81	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.004	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.025	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	79.9	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	21	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	26.4	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	6.23	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.004	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters															
pH	S.U.	7.59	7.37	7.42	7.53	7.29	7.33	7.56	6.04	6.39	6.23	6.58	6.22	6.37	7.02
Conductivity	umhos/cm	641	552	554	574	598	621	665	906	648	620	610	637	648	605
Temperature	°C	15.2	11.1	10	11.1	10.4	10.1	10.3	9.5	10.2	9.8	9.5	11.1	10.5	10.7
eH	millivts	-32	105	-	80	-	-	100	236	231	282	154	167	185	189
Dissolved Oxygen	mg/L	1.41	6.26	-	3.66	-	-	2.11	7.15	279	4.16	11.8	7.6	6.76	6.28
Turbidity	NTU	-	-	-	-	-	-	-	11	13	1	2	1	1	2
Supplemental Parameters															
Total Dissolved Solids	mg/L	413	337	273	356	350	303	726	629	364	478	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	<5	7.5	<5	<4	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

**TABLE 3
ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-03SBA**

PARAMETER	UNITS	10/25/00	10/24/01	10/29/02	10/09/03	10/21/04	1/10/06	09/27/06	11/26/07	10/07/08	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Annual Parameters															
Nitrogen, Ammonia	mg/L	7.31	0.21	<0.05	<0.05	<0.05	<0.05	2.39	0.559	0.269	0.199	0.575 ^B	0.425	0.24	0.25
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	<0.005	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	0.056	0.0307	0.029	0.037	0.0339	0.19 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.162	<0.02	0.069	<0.02	<0.02	<0.02	0.106	0.074	0.0633	0.069	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.0823	0.0664	0.0719	0.067	0.0694	0.07	0.074
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.007	<0.008	<0.005	<0.0055	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	<0.007	<0.005	<0.006	<0.005	<0.006	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.029	<0.011
Five Year Parameters															
TAL Inorganics															
Chloride	mg/L	-	-	-	-	-	78	-	-	-	73.4	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	0.17	-	-	-	0.0243	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	68	-	-	-	69.8	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	0.0952	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	0.00061	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	133	-	-	-	114	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	<0.1	-	-	-	0.762	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	<0.0002	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	36.7	-	-	-	31.3	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	13.5	-	-	-	1.43	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	49.6	-	-	-	34	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	0.022	-	-	-	<0.0045	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.0956	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	123	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	0.928	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	32.6	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	1.58	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	33.4	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0065	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters															
pH	S.U.	7.22	7.16	7.61	7.3	7.59	7.16	7.39	6.8	6.99	7.1	7.27	6.7	6.69	6.48
Conductivity	umhos/cm	1338	1180	975	1097	1066	1087	1081	900	1030	976	940	982	976	879
Temperature	°C	14.5	12.9	10.5	13	11.5	10.8	11.2	10.2	11.5	10.8	10.6	11.6	9.1	11
eH	millivts	-	-69	-	14	-	-	-84	-54.0	-64	18	-59	-15	38	20
Dissolved Oxygen	mg/L	-	7.08	-	0.71	-	-	2	5.8	1.33	0.61	1.48	1.18	1.3	0
Turbidity	NTU	-	-	-	-	-	-	-	43	12	1	1	1	4	9
Supplemental Parameters															
Total Dissolved Solids	mg/L	776	464	550	435	572	456	1170	623	503	641	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	<5	9	11	13	16

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 4

ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-045B

PARAMETER	UNITS	10/28/99	01/25/00	04/19/00	07/20/00	7/20/00#	10/24/00	01/25/01	10/24/01	10/29/02	10/09/03	10/21/04	1/10/06	09/28/06	11/26/07	10/07/08	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Quarterly Parameters																					
Nitrogen, Ammonia	mg/L	29	26.7	33.6	31.6	30.6	28.5	28.8	21.2	22	21.6	21.9	19.1	18.8	20.9	16.7	15	14 ^B	16.8	12	13
Arsenic, Dissolved	mg/L	0.023	0.03	0.0557	0.0319	0.0318	0.0307	0.0292	0.0108	0.0254	0.0091	0.0081	0.0081	0.0118	0.0127	< 0.003	< 0.004	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0141	0.00393	0.00327	< 0.005	< 0.005	< 0.005	0.006
Annual Parameters																					
Aluminum, Dissolved	mg/L	-	-	-	-	-	< 0.1	-	0.11	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.02	< 0.02	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.123	0.0762	0.0409	0.0261	0.0215	< 0.05 ^B	< 0.05 ^B
Antimony, Dissolved	mg/L	-	-	-	-	-	< 0.005	-	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.001	< 0.001	0.00108	< 0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.001	0.00125	0.00101	< 0.001	< 0.001	< 0.002	< 0.002
Cobalt, Dissolved	mg/L	-	-	-	-	-	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.001	< 0.001
Manganese, Dissolved	mg/L	-	-	-	-	-	0.122	-	0.05	< 0.02	< 0.02	< 0.02	0.028	0.0797	0.0663	< 0.01	< 0.01	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.057	< 0.01	< 0.01	< 0.01	< 0.01	0.0088	0.041
Nickel, Dissolved	mg/L	-	-	-	-	-	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.007	< 0.007	< 0.005	< 0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.006	< 0.005	< 0.005	< 0.005	< 0.005	0.0036	0.0038
Benzene	ug/L	-	-	-	-	-	< 5	-	< 5	< 5	< 5	< 5	< 5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	ug/L	-	-	-	-	-	< 1	-	< 1	< 1	< 1	< 1	< 1	1.02	1.25	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-Chloropropane	ug/L	-	-	-	-	-	< 1	-	< 1	< 1	< 1	< 1	< 1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.029	< 0.011
Five Year Parameters																					
TAL Inorganics																					
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	82	-	-	-	65.5	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	0.0819	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	33.7	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.2	-	-	-	0.0727	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.001	-	-	-	< 0.0004	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.0005	-	-	-	< 0.0004	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	54.6	-	-	-	< 5	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.005	-	-	-	0.00615	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.025	-	-	-	< 0.006	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.1	-	-	-	< 0.5	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.003	-	-	-	< 0.0004	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	39.5	-	-	-	< 5	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.0002	-	-	-	< 0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	146	-	-	-	762	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.005	-	-	-	< 0.007	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.0005	-	-	-	< 0.0002	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	126	-	-	-	342	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.002	-	-	-	< 0.0004	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.02	-	-	-	< 0.004	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	< 0.02	-	-	-	< 0.008	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.115	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0004	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.23	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00518	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.4	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.52	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	682	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	322	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.009	-	-	-	-
TCL VOCs*																					
1,2-dichloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	1.39	-	-	-	-
Acetone	ug/L	-	-	-	-	-	-	-	-	-	-	-	26.4	-	-	-	114	-	-	-	-
TCL SVOCs*																					
TCL Pesticides*	ug/L	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*																					
TCL PCBs*	ug/L	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters																					
pH	S.U.	7.14	7.29	7.23	7.01	7.01	7.05	7.08	7.9	11.79	7.53	7.69	10.67	10.4	8.15	11.98	12	12.7	12.6	12.42	12.83
Conductivity	umhos/cm	1366	1383	1424	1458	1458	1457	1470	1370	2090	1300	1271	1290	1871	1030	4380	7150	6400	7120	6600	5880
Temperature	°C	11.8	10.5	12.2	12.5	12.5	17.5	10.1	13.4	10.5	12.8	11.5	10.6	11.6	10.4	11.7	10.8	11	11.7	10.9	10.5
eH	millivts	-5	-12	-15	-3	-3	17	-63.2	-99	-	42	-	-	-116	-110	-82	-43	-128	-101	-136	-102
Dissolved Oxygen	mg/L	0.87	0.8	1.3	1.18	1.18	1.98	1.24	3.32	-	2.56	-	-	2.33	5.24	2.92	8.63	13.1	6.61	5.62	6.17
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	-	-	-	45	112	1	64	12	22	15
Supplemental Parameters																					
Total Dissolved Solids	mg/L	652	673	644	740	702	684	702	714	912	772	648	636	598	315	1560	2280	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5	10	< 5	13	69

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 5

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-045G**

PARAMETER	UNITS	10/24/00	10/24/01	10/29/02	10/09/03	10/21/04	1/10/06	09/27/06	11/26/07	10/07/08	08/27/09	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Annual Parameters																
Nitrogen, Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.124	<0.05	< 0.05	-	<0.05	0.139 ^B	0.091	<0.2	0.28
Arsenic, Dissolved	mg/L	0.0222	0.007	0.0123	0.0092	0.0057	0.0096	0.0101	0.00631	0.00829	0.0096	0.00613	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	0.167	0.167	0.022	0.0258	0.0173	0.0746	0.14	0.024
Aluminum, Dissolved	mg/L	1.9	<0.1	<0.1	0.26	<0.1	<0.1	<0.05	<0.05	< 0.02	0.026	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	7.74	4.42	0.561	0.517	0.108	1.54	3.1 ^B	0.21 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	< 0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	0.0011	< 0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	0.00931	0.00701	< 0.005	<0.005	<0.005	<0.005	0.0037	<0.001
Manganese, Dissolved	mg/L	0.43	0.376	0.304	0.338	0.345	0.288	0.236	0.195	0.266	0.168	0.133	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.333	0.488	0.185	0.198	0.473	0.244	0.26	0.22
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	0.00609	< 0.005	< 0.005	<0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	0.0219	0.0137	< 0.005	<0.006	<0.005	<0.006	0.0076	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	< 1	-	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	< 1	-	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	-	<0.02	<0.02	<0.02	<0.029	<0.011
Five Year Parameters																
TAL Inorganics																
Chloride	mg/L	-	-	-	-	-	<5	-	-	-	-	10.8	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	<0.02	-	-	-	-	<0.02	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	58	-	-	-	-	45.9	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	-	0.0234	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	105	-	-	-	-	75.1	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	2.22	-	-	-	-	0.714	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	-	<0.0002	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	26.2	-	-	-	-	19.8	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	<5	-	-	-	-	<1	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	3.3	-	-	-	-	<5	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	-	<0.0045	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	0.0295	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	76.7	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	2.06	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	0.003	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	19.7	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	0.00588	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-
Field Parameters																
pH	S.U.	7.16	7.5	8.34	8.35	7.94	7.25	7.86	7.85	6.91	6.34	7.15	6.26	6.63	6.23	6.14
Conductivity	umhos/cm	637	604	605	639	590	573	549	680	505	644	528	516	522	462	394
Temperature	°C	16.1	13.3	10.5	12.1	11.5	11.3	10.5	10	11.6	11.3	10.9	11.3	12.2	9.8	11.6
eH	millivts	-	-71	-	35	-	-	-84	-46	-47	-37	58	53	12	4	68
Dissolved Oxygen	mg/L	-	8.3	-	2.59	-	-	1.9	4.31	1.15	11.6	3.5	1.68	1.21	1.45	0
Turbidity	NTU	-	-	-	-	-	-	-	116	112	49	84	36	195	127	57
Supplemental Parameters																
Total Dissolved Solids	mg/L	448	395	344	421	332	240	246	451	262	304	422	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	30	13.5	6	57.5	59	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 6

ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-05SB

PARAMETER	UNITS	10/27/99	01/25/00	01/25/00#	04/19/00	04/19/00	07/20/00	10/24/00	01/25/01	10/24/01	10/24/01#	10/30/02	10/09/03	10/21/04	1/10/06	09/28/06	11/26/07	10/09/08	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Quarterly Parameters																							
Nitrogen, Ammonia	mg/L	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	0.079	0.146 ^B	0.089	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00316	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Annual Parameters																							
Aluminum, Dissolved	mg/L	-	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.365	< 0.02	<0.01	<0.01	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	-	-	-	-	-	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	<0.001	<0.01	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	-	-	-	-	-	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	<0.005	<0.005	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	-	-	-	-	-	-	0.079	-	0.082	0.047	<0.02	<0.02	<0.02	0.082	0.0737	0.0764	0.0759	0.074	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0913	0.0739	0.0717	0.0367	0.0813	0.082	<0.005
Nickel, Dissolved	mg/L	-	-	-	-	-	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	< 0.005	<0.005	<0.005	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	-	-	-	-	-	-	<5	-	<5	<5	<5	<5	<5	<5	<1	<1	< 1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	-	-	-	-	-	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	< 1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	-	-	-	-	-	-	<1	-	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.03	<0.011
Five Year Parameters																							
TAL Inorganics																							
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	52	-	-	-	73.6	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	0.0213	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	66	-	-	-	60.8	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	0.119	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	0.000288	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	126	-	-	-	108	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.97	-	-	-	0.738	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	-	-	-	<0.0002	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	35.3	-	-	-	32.4	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	2.04	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	26.5	-	-	-	29.9	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	<0.0075	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	0.117	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00183	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.788	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.59	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.3	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0075	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters																							
pH	S.U.	7.45	7.51	7.51	7.45	7.45	7.22	7.44	6.57	7.26	7.26	7.7	7.3	7.52	7.35	7.52	6.47	6.73	7.48	7.8	7.21	7.41	9.62
Conductivity	umhos/cm	725	738	738	754	754	766	817	1210	683	683	683	784	663	810	838	1010	846	895	869	951	1070	879
Temperature	°C	10.7	9.6	9.6	10.9	10.9	11.7	15	9.5	12.7	12.7	11.7	11.4	10.8	10.4	10.2	9.9	11.2	10.5	12.8	12.1	10.5	10
eH	millivts	-19	-27	-27	-27	-27	-16	37	38.6	-65	-65	-	68	-	-	-74	-29	-26	45	-30	-82	-100	12
Dissolved Oxygen	mg/L	0.67	0.48	0.48	1.27	1.27	1.8	1.47	2.19	4.5	4.5	-	1.28	-	-	4.84	2.42	1.03	1.22	2.8	1.05	0	6.41
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109	7	32	11	1	9	4
Supplemental Parameters																							
Total Dissolved Solids	mg/L	421	449	439	410	410	476	452	468	432	422	425	427	415	448	420	663	527	508	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	<5	<5	<4	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

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**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 7

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-05SG**

PARAMETER	UNITS	10/24/00	10/24/01	10/24/01#	10/30/02	10/09/03	10/21/04	1/10/06	09/28/06	11/26/07	10/09/08	10/09/08#	11/17/09	11/08/10	11/08/10#	11/07/11	11/07/11 #	11/14/12	11/11/13
Annual Parameters																			
Nitrogen, Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.138 ^B	0.16 ^B	0.06	0.069	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003	<0.003	-	-	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.02	<0.02	<0.01	-	-	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	<0.05	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.251	0.208	0.162	0.296	0.123	0.174	0.234	0.209	0.247	0.26	0.256	0.325	-	-	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	0.309	0.272	0.286	0.333	0.321	0.312	0.248	0.29	0.5	0.38
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.008	<0.006	<0.005	<0.006	<0.0055	-	-	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	<0.008	<0.006	<0.006	<0.006	<0.005	<0.005	<0.005	<0.005	0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.011
Five Year Parameters																			
TAL Inorganics																			
Chloride	mg/L	-	-	-	-	-	-	146	-	-	-	-	164	-	-	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	<0.005	-	-	-	-	<0.005	-	-	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	<0.02	-	-	-	-	<0.02	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	69	-	-	-	-	52.8	-	-	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	<0.2	-	-	-	-	0.0631	-	-	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	<0.001	-	-	-	-	<0.0002	-	-	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0002	-	-	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	132	-	-	-	-	120	-	-	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	<0.005	-	-	-	-	<0.001	-	-	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	<0.025	-	-	-	-	<0.0015	-	-	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	0.32	-	-	-	-	0.317	-	-	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	<0.003	-	-	-	-	0.00504	-	-	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	33.1	-	-	-	-	30.8	-	-	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	<0.0002	-	-	-	-	<0.0002	-	-	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	<5	-	-	-	-	1.9	-	-	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	<0.005	-	-	-	-	<0.002	-	-	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0001	-	-	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	88.8	-	-	-	-	71.5	-	-	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	<0.002	-	-	-	-	<0.0002	-	-	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	<0.02	-	-	-	-	<0.002	-	-	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	<0.02	-	-	-	-	0.00728	-	-	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	0.0629	-	-	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	0.000237	-	-	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	128	-	-	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	0.382	-	-	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	2.21	-	-	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	71.4	-	-	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	0.00485	-	-	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
Field Parameters																			
pH	S.U.	7.52	7.43	7.43	7.51	7.53	7.67	7.41	7.56	7.79	6.82	6.82	7.47	7.48	7.48	7.2	7.2	7.21	7.55
Conductivity	umhos/cm	943	738	738	986	930	972	1104	1088	1040	1170	1170	1270	1180	1180	1230	1230	1160	988
Temperature	°C	15.7	13.1	13.1	12.2	11.8	11.2	11.1	10.8	11	11.6	11.6	11.3	12.8	12.8	12.5	12.5	11.2	10.4
eH	millivts	10	7	7	-	82	-	-	29	-7	-13	-13	-50	-102	-102	-70	-70	-94	-64
Dissolved Oxygen	mg/L	1.3	3.29	3.29	-	3.08	-	-	6.16	7.59	2.05	2.05	0.82	1.04	1.04	0.95	0.95	0	0
Turbidity	NTU	-	-	-	-	-	-	-	-	31	41	41	37	15	15	11	11	5	8
Supplemental Parameters																			
Total Dissolved Solids	mg/L	527	453	446	551	561	558	536	561	554	663	704	629	-	-	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	-	<5	<5	<5	<5	<5	<4	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 8

ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-06SB[illegible]

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 9

ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-075B

PARAMETER	UNITS	10/24/00	10/24/00#	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	1/11/06#	09/27/06	11/26/07	10/07/08	08/27/09	11/18/09	11/18/09#	11/09/10	11/09/10#	11/08/11	11/15/12	11/15/12#	11/12/13	11/12/13#
Annual Parameters																						
Nitrogen, Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	-	<0.05	0.069	0.193 ^B	0.318 ^B	0.071	<0.2	<0.2	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	< 0.003	<0.003	<0.003	-	-	-	-	-	-	
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	0.00462	< 0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	< 0.01	<0.01	<0.01	-	-	-	-	-	-	
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	0.0502	0.811	0.0183	0.0141	0.0148	0.0114	<0.01	<0.02	<0.05 ^B	<0.05 ^B	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	< 0.001	<0.001	<0.001	-	-	-	-	-	-	
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	< 0.001	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	< 0.005	<0.005	<0.005	-	-	-	-	-	-	
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	0.04	0.031	<0.02	<0.02	<0.02	<0.02	0.037	<0.02	<0.01	<0.01	< 0.01	< 0.01	<0.01	<0.01	-	-	-	-	-	-	
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.01	0.241	0.106	0.0251	0.0271	0.0114	0.0111	<0.01	0.037	0.03	0.024	0.018
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	< 0.005	< 0.005	<0.005	<0.005	-	-	-	-	-	-	
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<1	<1	< 1	-	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	< 1	-	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.029	<0.011	<0.011
Five Year Parameters																						
TAL Inorganics																						
Chloride	mg/L	-	-	-	-	-	-	54	52	-	-	-	-	64.9	65	-	-	-	-	-	-	
Cyanide, Total	mg/L	-	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	<0.005	-	-	-	-	-	-	
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	1.07	1.12	-	-	-	-	0.566	0.568	-	-	-	-	-	-	
Sulfate	mg/L	-	-	-	-	-	-	26	23	-	-	-	-	25	25.2	-	-	-	-	-	-	
Barium, Dissolved	mg/L	-	-	-	-	-	-	<0.2	<0.2	-	-	-	-	0.0143	0.0142	-	-	-	-	-	-	
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	<0.0002	<0.0002	-	-	-	-	-	-	
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	<0.0005	<0.0005	-	-	-	-	<0.0002	<0.0002	-	-	-	-	-	-	
Calcium, Dissolved	mg/L	-	-	-	-	-	-	90.1	96.1	-	-	-	-	78.5	77.8	-	-	-	-	-	-	
Chromium, Dissolved	mg/L	-	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	
Copper, Dissolved	mg/L	-	-	-	-	-	-	<0.025	<0.025	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	
Iron, Dissolved	mg/L	-	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-	
Lead, Dissolved	mg/L	-	-	-	-	-	-	<0.003	<0.003	-	-	-	-	0.000256	<0.0002	-	-	-	-	-	-	
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	21.8	22.8	-	-	-	-	19.6	19.5	-	-	-	-	-	-	
Mercury, Dissolved	mg/L	-	-	-	-	-	-	<0.0002	<0.0002	-	-	-	-	<0.0002	<0.0002	-	-	-	-	-	-	
Potassium, Dissolved	mg/L	-	-	-	-	-	-	<5	<5	-	-	-	-	1.36	1.36	-	-	-	-	-	-	
Selenium, Dissolved	mg/L	-	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.002	<0.002	-	-	-	-	-	-	
Silver, Dissolved	mg/L	-	-	-	-	-	-	<0.0005	<0.0005	-	-	-	-	<0.0001	<0.0001	-	-	-	-	-	-	
Sodium, Dissolved	mg/L	-	-	-	-	-	-	38.7	41.1	-	-	-	-	40.9	41.2	-	-	-	-	-	-	
Thallium, Dissolved	mg/L	-	-	-	-	-	-	<0.002	<0.002	-	-	-	-	<0.0002	<0.0002	-	-	-	-	-	-	
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	<0.002	<0.002	-	-	-	-	-	-	
Zinc, Dissolved	mg/L	-	-	-	-	-	-	<0.02	<0.02	-	-	-	-	<0.004	<0.004	-	-	-	-	-	-	
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.0164	0.0167	-	-	-	-	-	-	
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0002	-	-	-	-	-	-	
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	80.6	80.4	-	-	-	-	-	-	
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	<0.002	-	-	-	-	-	-	
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	-	-	-	-	-	-	
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.215	0.198	-	-	-	-	-	-	
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	19.7	19.6	-	-	-	-	-	-	
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0002	-	-	-	-	-	-	
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	1.57	1.54	-	-	-	-	-	-	
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	-	-	-	-	-	-	
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	-	-	-	-	-	-	
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	40.3	39	-	-	-	-	-	-	
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	-	-	-	-	-	-	
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.004	-	-	-	-	-	-	
TCL VOCs*	ug/L	-	-	-	-	-	-	ND	ND	-	-	-	-	ND	ND	-	-	-	-	-	-	
TCL SVOCs*	ug/L	-	-	-	-	-	-	ND	ND	-	-	-	-	-	-	-	-	-	-	-	-	
Di-n-propylnitrosamine	ug/L	-	-	-	-	-	-	ND	ND	-	-	-	-	ND	30.8	-	-	-	-	-	-	
TCL Pesticides*	ug/L	-	-	-	-	-	-	ND	ND	-	-	-	-	ND	ND	-	-	-	-	-	-	
TCL PCBs*	ug/L	-	-	-	-	-	-	ND	ND	-	-	-	-	ND	ND	-	-	-	-	-	-	
Field Parameters																						
pH	S.U.	7.31	7.31	8.41	7.8	7.53	7.63	7.79	7.79	7.4	7.05	7.25	7.01	6.4	6.4	7.58	7.58	7.69	6.55			

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 10

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-07SG**

PARAMETER	UNITS	10/24/00	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	09/27/06	11/26/07	10/07/08	10/7/08#	11/18/09	11/09/10	11/08/11	11/15/12	11/15/12#	11/12/13	11/12/13#
Annual Parameters																		
Nitrogen, Ammonia	mg/L	8.64	3.98	3.66	3.5	5.07	5.96	4.04	4.38	1.28	1.2	1.58	2.69 ^B	1.85	2.8	2.9	2.1	2.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	< 0.003	0.00316	-	-	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	<0.005	0.00633	0.00694	0.00312	0.00464	<0.004	0.0056	0.005	0.005	<0.005
Aluminum, Dissolved	mg/L	0.24	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	< 0.02	<0.01	-	-	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	<0.05	1.06	1.1	<0.01	<0.01	<0.02	<0.05 ^B	<0.05 ^B	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	< 0.001	<0.001	-	-	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	< 0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	< 0.005	<0.005	-	-	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	0.0024	0.0023	0.0026	0.0026
Manganese, Dissolved	mg/L	1.37	1.22	1.11	1.17	1.02	1	0.794	0.741	0.752	0.761	0.591	-	-	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.8	0.834	0.86	0.636	0.598	0.628	0.64	0.63	0.71	0.74
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00594	0.00762	< 0.005	< 0.005	<0.007	-	-	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	0.00562	0.00565	0.0055	<0.0065	<0.006	<0.006	0.0028	0.0028	0.0034	0.0033
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	< 1	< 1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	< 1	< 1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	< 0.02	<0.02	<0.02	<0.02	<0.03	<0.030	<0.011	<0.011
Five Year Parameters																		
TAL Inorganics																		
Chloride	mg/L	-	-	-	-	-	5	-	-	-	-	1.48	-	-	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	-	<0.005	-	-	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	<0.02	-	-	-	-	<0.02	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	6	-	-	-	-	<1	-	-	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	-	0.0999	-	-	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	-	<0.0002	-	-	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	-	<0.0002	-	-	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	122	-	-	-	-	91.7	-	-	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	-	<0.001	-	-	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	-	<0.001	-	-	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	0.49	-	-	-	-	0.898	-	-	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	-	0.000334	-	-	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	25.4	-	-	-	-	15.5	-	-	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	-	<0.0002	-	-	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	8.7	-	-	-	-	3.75	-	-	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	-	<0.002	-	-	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	-	<0.0001	-	-	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	5	-	-	-	-	<5	-	-	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	-	<0.0002	-	-	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	-	<0.002	-	-	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	-	<0.005	-	-	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	0.108	-	-	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	94.4	-	-	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	0.814	-	-	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	15.6	-	-	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	4.09	-	-	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	0.00558	-	-	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-	-	-
Field Parameters																		
pH	S.U.	6.77	7.25	7.11	7.39	7.38	7.11	7.35	6.72	6.79	6.75	6.63	7.19	6.93	6.55	6.55	6.89	6.89
Conductivity	umhos/cm	1090	746	703	766	708	703	680	852	656	656	605	607	663	623	623	658	658
Temperature	°C	17.2	15.1	12.7	13.6	13	11	13.3	11.6	14.2	14.2	12	11.9	12.7	11.4	11.4	9.3	9.3
eH	millivts	-	140	-	158	-	-	111	-73	52	52	45	-116	-57	-96	-96	-50	-50
Dissolved Oxygen	mg/L	-	3.84	-	2.05	-	-	3.7	1.38	2	2	1.7	1.53	1.16	0	0	0	0
Turbidity	NTU	-	-	-	-	-	-	-	17	212	212	46	1	1	1	1	3	3
Supplemental Parameters																		
Total Dissolved Solids	mg/L	604	460	424	433	406	365	342	225	322	320	300	-	-	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	58	<5	<5	4	4	<4	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Land

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 11

ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-085B

PARAMETER	UNITS	10/28/99	01/25/00	04/19/00	07/20/00	10/24/00	01/25/01	01/25/01#	10/24/01	10/29/02	10/09/03	10/21/04	1/10/06	09/27/06	11/27/07	10/07/08	8/27/09	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Quarterly Parameters																						
Nitrogen, Ammonia	mg/L	0.52	0.9	0.4	0.52	0.45	0.52	0.49	0.2	0.18	<0.05	0.07	0.15	0.182	<0.05	< 0.05	-	0.145	0.257 ^B	0.115	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0054	0.0099	0.0152	0.0079	<0.005	0.00504	<0.005	0.00525	<0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	0.0132	<0.003	0.00342	0.00694	<0.006	<0.005	<0.005
Annual Parameters																						
Aluminum, Dissolved	mg/L	-	-	-	-	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	<0.01	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.108	0.289	0.128	0.025	0.0978	0.0783	0.064 ^B	0.058 ^B
Antimony, Dissolved	mg/L	-	-	-	-	<0.005	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	< 0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	-	-	-	-	<0.01	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	-	-	-	-	0.087	-	-	0.135	0.072	<0.020	0.081	0.066	0.0594	0.0404	0.0196	0.0631	0.0691	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0487	0.0544	0.0648	0.0761	0.0661	0.0467	0.034	0.047
Nickel, Dissolved	mg/L	-	-	-	-	<0.05	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.006	< 0.005	< 0.005	<0.005	-	-	-	-
Nickel, Total	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.008	< 0.0052	< 0.005	<0.005	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	-	-	-	-	<5	-	-	<5	<5	<5	<5	<5	<1	<1	< 1	-	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	-	-	-	-	<1	-	-	<1	<1	<1	<1	<1	<1	<1	< 1	-	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	-	-	-	-	<1	-	-	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	-	<0.02	<0.02	<0.02	<0.029	<0.011
Five Year Parameters																						
TAL Inorganics																						
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	19.5	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.02	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	82	-	-	-	-	67.3	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	0.0606	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	118	-	-	-	-	83.1	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.025	-	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	0.452	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.003	-	-	-	-	0.00024	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	30.9	-	-	-	-	23.2	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	1.37	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	22.6	-	-	-	-	10.9	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.005	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0611	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.558	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.1	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.62	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.6	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.006	-	-	-	-
TCL VOCs*																						
Naphthalene	ug/L	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	-	-	-	-	-	-
TCL SVOCs*																						
TCL Pesticides*	ug/L	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	-	5.84	-	-	-	-
TCL PCBs*																						
TCL PCBs*	ug/L	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	-	-	-	-
Field Parameters																						
pH	S.U.	7.25	7.38	7.34	7.03	7.28	7.08	7.08	7.55	7.61	7.28	7.48	7.46	7.45	6.04	7.42	6.66	7.84	7.9	7.82	7.38	6.36
Conductivity	umhos/cm	928	960	982	1002	1034	1010	1010	652	543	745	718	754	728	879	525	770	590	562	15	535	471
Temperature	°C	11.4	9.4	11.2	11.9	14	9.6	9.6	13	9.9	12.8	11.1	10.2	11.4	9.6	11.1	11.2	10.6	10.5	13.5	10.3	10.5
eH	millivts	-10	-17	-19	-6	-	22.3	22.3	140	-	38	-	-	170	217	48	-78	-13	-77	15	34	80
Dissolved Oxygen	mg/L	0.48	0.12	1.04	2.05	-	2.3	2.3	6.62	-	1.02	-	-	3.1	7.77	2.71	11.9	2.13	3.2	2.59	2.02	0
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	-	-	-	42	68	ND	1	16	13	5	24
Supplemental Parameters																						
Total Dissolved Solids	mg/L	558	580	538	606	650	626	599	421	440	331	293	368	402	248	274	418	395	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	<5	14.5	<5	10	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 12

ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-095B

PARAMETER	UNITS	10/28/99	01/25/00	04/19/00	04/19/00#	07/20/00	10/24/00	01/25/01	10/24/01	10/29/02	10/29/02#	10/09/03	10/09/03#	10/21/04	1/10/06	09/27/06	11/27/07	10/07/08	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Quarterly Parameters																							
Nitrogen, Ammonia	mg/L	13	12	11.8	9.8	10.5	10.4	11.3	10.4	8.24	8.44	7.28	7.32	7.87	6.84	6.6	6.12	3.16	3.66	4.98 ^B	4.41	4.8	4.7
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Annual Parameters																							
Aluminum, Dissolved	mg/L	-	-	-	-	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.326	0.0712	0.0596	0.0517	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	-	-	-	-	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	-	-	-	-	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	-	-	-	-	-	0.095	-	0.08	0.071	0.073	0.084	0.085	0.08	0.074	0.0675	0.0663	0.0518	0.0586	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0756	0.0611	0.0646	0.0629	0.0612	0.06	0.069
Nickel, Dissolved	mg/L	-	-	-	-	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.006	<0.005	< 0.005	<0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	<0.0055	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	-	-	-	-	-	<5	-	<5	<5	<5	<5	<5	<5	<5	<1	<1	< 1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	-	-	-	-	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	< 1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	-	-	-	-	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.029	<0.011	<0.011
Five Year Parameters																							
TAL Inorganics																							
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	64	-	-	-	59.1	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	0.343	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	62	-	-	-	62.3	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.236	-	-	-	0.155	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	125	-	-	-	96	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	0.77	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	-	-	-	<0.0002	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	37.6	-	-	-	30.4	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	13.2	-	-	-	8.02	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	45.6	-	-	-	31.5	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	<0.008	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.158	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.8	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.77	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.1	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0095	-	-	-	-
TCL VOCs*																							
TCL SVOCs*	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters																							
pH	S.U.	7.17	7.31	7.26	7.26	7.17	7.13	6.99	7.29	7.38	7.38	7.14	7.14	7.24	7.25	7.43	6.45	7.11	7.85	7.44	7.12	7.04	7.45
Conductivity	umhos/cm	1239	1235	1190	1190	1210	1246	1290	930	937	937	951	951	993	941	970	900	905	929	911	944	946	828
Temperature	°C	11.3	10	11.2	11.2	12.2	14	9.7	14.9	10.9	10.9	12.3	12.3	10.8	10.4	11.5	9	11	10.6	12.3	12.7	9.9	9.5
oH	millivts	-6	-14	-16	-16	-11	-	16.9	-76	-	-	11	11	-	-	-60	16	18	-80	-124	-100	-109	-89
Dissolved Oxygen	mg/L	0.48	0.56	1.47	1.47	2.17	-	2.2	3.21	-	-	1.29	1.29	-	-	3	7.54	0.99	1.14	1.28	1.59	0	0
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	36	ND	24	2	6	21
Supplemental Parameters																							
Total Dissolved Solids	mg/L	656	662	620	600	646	710	662	554	503	503	537	557	525	380	474	564	494	445	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	21	<5	<4	<4

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 13

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-09DB**

PARAMETER	UNITS	10/25/00	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	09/28/06	11/27/07	10/09/08	11/18/09	11/09/10	11/08/11	11/15/12	11/12/13
Quarterly Parameters															
Nitrogen, Ammonia	mg/L	0.11	1.45	0.14	0.85	<0.05	0.11	0.082	<0.05	0.094	0.082	0.221 ^B	0.123	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Annual Parameters															
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	<0.05	0.436	0.0115	<0.01	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.038	<0.02	0.04	<0.020	<0.020	0.035	0.0312	<0.01	0.0444	0.0596	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	<0.01	0.0542	0.0612	0.065	0.0561	0.083	0.091
Nickel, Dissolved	mg/L	<0.05	0.0541	<0.05	<0.05	<0.05	<0.05	<0.005	0.0231	< 0.005	<0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	0.0219	< 0.005	<0.005	<0.005	<0.006	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	< 1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	< 1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.03	<0.011
Five Year Parameters															
TAL Inorganics															
Chloride	mg/L	-	-	-	-	-	18	-	-	-	23.6	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	<0.02	-	-	-	0.0248	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	24	-	-	-	51.5	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	0.0465	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	91.7	-	-	-	87.2	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	0.58	-	-	-	0.566	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	0.000234	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	28.7	-	-	-	28.1	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	<5	-	-	-	1.3	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	16.4	-	-	-	10.6	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.004	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.0568	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	92.8	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	0.679	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	28.8	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	1.52	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	10.9	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0045	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters															
pH	S.U.	7.38	9.44	7.65	7.81	7.56	7.45	7.75	8.7	6.86	6.97	7.39	7.2	6.82	7.32
Conductivity	umhos/cm	617	579	546	562	580	573	625	785	659	698	712	697	727	639
Temperature	°C	14.9	14.9	11.5	12	10.8	10.2	10.5	10.4	12	11.2	10.7	12.1	9	8.3
eH	millivts	6	43	-	39	-	-	111	-98	-66	-59	-94	-64	-97	-51
Dissolved Oxygen	mg/L	2.13	4.48	-	0.6	-	-	2.09	1.93	1.31	0.95	0.81	0.97	0	0
Turbidity	NTU	-	-	-	-	-	-	-	2	108	68	1	6	1	10
Supplemental Parameters															
Total Dissolved Solids	mg/L	381	339	316	314	295	289	283	388	369	534	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	<5	<5	7	5	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 14

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-10SG**

PARAMETER	UNITS	10/25/00	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	09/28/06	11/27/07	10/09/08	11/17/09	11/08/10	11/07/11	11/14/12	11/11/13
Annual Parameters															
Nitrogen, Ammonia	mg/L	1.55	1.71	0.92	1.12	1.24	0.85	1.21	0.124	1.37	1.11	1.64 ^B	2.63	1.7	1.9
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	0.233	<0.1	<0.1	<0.05	<0.05	< 0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	0.702	0.675	0.443	2.27	0.521	0.64 ^B	1.3 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.124	0.102	0.099	0.184	0.117	0.135	0.119	0.026	0.108	0.103	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.019	0.13	0.117	0.137	0.129	0.13	0.15
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	0.00557	<0.007	<0.005	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	< 1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	< 1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.029	<0.011
Five Year Parameters															
TAL Inorganics															
Chloride	mg/L	-	-	-	-	-	34	-	-	-	55.8	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	<0.02	-	-	-	0.0362	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	24	-	-	-	40.6	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	0.0863	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	11.5	-	-	-	95.3	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	0.000337	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	32.8	-	-	-	29.9	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	<5	-	-	-	3.16	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	20.1	-	-	-	33	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.0055	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.0974	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.000666	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	103	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	0.917	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	0.00216	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	31	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	3.66	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	33.4	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	0.0115	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters															
pH	S.U.	7.44	6.76	6.71	7.55	7.55	7.29	7.47	7.64	7.17	6.54	6.62	6.85	5.66	6.97
Conductivity	umhos/cm	782	662	652	748	723	730	730	756	784	940	822	857	714	790
Temperature	°C	15.4	14	10.4	13.9	11.3	5.1	13	9.9	14.4	8	9	12.8	8.2	9.5
eH	millivts	6	-108	-	76	-	-	5	92	-36	82	-	-30	-8	-
Dissolved Oxygen	mg/L	3.52	5.68	-	2.99	-	-	4.16	3.66	3.63	8.32	-	4.66	3.87	-
Turbidity	NTU	-	-	-	-	-	-	-	84	77	211	-	360	44	-
Supplemental Parameters															
Total Dissolved Solids	mg/L	472	382	381	430	414	371	330	511	468	484	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	<5	12.5	21.5	66	79

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 15

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-155B**

PARAMETER	UNITS	10/25/00	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	09/28/06	11/27/07	10/09/08	11/18/09	11/09/10	11/08/11	11/15/12	11/12/13
Annual Parameters															
Nitrogen, Ammonia	mg/L	3.26	3.29	4.04	2.58	2.07	2.29	2.32	2.41	4.52	4.69	4.7 ^B	4.13	3.4	3.5
Arsenic, Dissolved	mg/L	0.0304	0.0164	0.0573	0.0289	0.0074	0.0278	0.0358	0.0355	0.0607	0.0591	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	0.0334	0.0873	0.0614	0.058	0.0609	0.056	0.074
Aluminum, Dissolved	mg/L	0.84	<0.1	<0.1	<0.1	<0.1	0.151	<0.05	<0.05	<0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	<0.05	1.56	<0.02	0.0105	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.304	0.204	0.211	0.152	0.148	0.161	0.132	0.145	0.16	0.152	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.152	0.208	0.168	0.136	0.14	0.14	0.16
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	<0.005	0.00526	<0.005	<0.005	<0.006	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.02	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.011
Five Year Parameters															
TAL Inorganics															
Chloride	mg/L	-	-	-	-	-	50	-	-	-	56.9	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	<0.02	-	-	-	0.0416	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	44	-	-	-	41.6	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	0.108	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	106	-	-	-	90.6	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	2.24	-	-	-	2.52	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	0.000224	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	30.2	-	-	-	28.3	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	5.6	-	-	-	7.91	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	35	-	-	-	35	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.005	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.118	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0004	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	94.8	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	2.86	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	29.3	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	9.25	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	36.3	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	0.00863	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters															
pH	S.U.	7.22	7.28	7.37	7.33	7.6	7.31	7.71	6.77	6.77	6.69	7.34	7.25	6.76	6.28
Conductivity	umhos/cm	782	693	740	742	761	769	824	980	827	891	899	905	874	821
Temperature	°C	15.4	15.1	12.2	12.5	11.4	10.8	10.3	10.5	12.1	11.2	10.5	11.8	10.7	7.4
EH	millivts	27	-115	-	20	-	-	-59	-107	-97	-92	-130	-26	-127	-99
Dissolved Oxygen	mg/L	2.65	2.17	-	2.7	-	-	4.79	1.33	1.51	0.27	1.05	0.99	0	0
Turbidity	NTU	-	-	-	-	-	-	-	9	174	60	2	1	1	19
Supplemental Parameters															
Total Dissolved Solids	mg/L	433	384	398	426	398	383	382	467	447	570	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	12	6	8	<4	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 16

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-16DB**

PARAMETER	UNITS	10/24/00	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	09/28/06	11/27/07	10/09/08	11/18/09	11/09/10	11/08/11	11/15/12	11/12/13
Annual Parameters															
Nitrogen, Ammonia	mg/L	0.12	<0.05	0.08	<0.05	<0.05	0.08	0.097	<0.05	0.065	0.105	0.229 ^B	0.135	<0.2	0.54
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	<0.005	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	<0.05	0.031	0.0163	0.0216	0.0289	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.026	0.036	0.035	<0.02	<0.02	0.03	0.0279	0.0187	0.0338	0.0317	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.0257	0.0433	0.0341	0.0304	0.0313	0.031	0.039
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.031	<0.011
Five Year Parameters															
TAL Inorganics															
Chloride	mg/L	-	-	-	-	-	22	-	-	-	17.7	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.02	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	21	-	-	-	25.3	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	<0.2	-	-	-	0.0399	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	89.1	-	-	-	76.5	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	0.57	-	-	-	0.51	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	0.000227	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	28	-	-	-	25.7	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	<5	-	-	-	1.33	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	16.2	-	-	-	13.8	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.004	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.0459	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	81.7	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	0.623	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	27	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	1.57	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	14.5	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters															
pH	S.U.	7.24	7.53	7.5	7.14	7.53	7.42	7.79	6.96	6.96	6.98	7.5	7.21	6.9	8.63
Conductivity	umhos/cm	614	530	536	566	570	568	613	811	593	639	651	672	671	616
Temperature	°C	15.1	15.7	11.7	11.9	10.9	10.6	10.7	10	11.7	11.2	10.5	11.7	10.2	7.9
eH	millivts	12	76	-	42	-	-	84	-66	13	-69	-116	-82	-116	-72
Dissolved Oxygen	mg/L	2.8	6.86	-	3.2	-	-	4.71	5.13	1.81	0.73	0.84	0.97	0	0
Turbidity	NTU	-	-	-	-	-	-	-	1	15	54	8	2	1	8
Supplemental Parameters															
Total Dissolved Solids	mg/L	362	305	319	336	321	294	284	376	334	485	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	6.5	5	5	5	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

**ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING**

TABLE 17

**ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-16SB**

PARAMETER	UNITS	10/24/00	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	09/28/06	11/27/07	10/06/08	11/18/09	11/09/10	11/08/11	11/15/12	11/12/13
Annual Parameters															
Nitrogen, Ammonia	mg/L	7.58	6.96	9.96	6.06	6.69	6.29	5.7	5.58	4.51	3.69	3.64 ^B	3.13	2.6	2.6
Arsenic, Dissolved	mg/L	0.0083	0.0062	<0.005	0.0098	<0.005	0.0072	0.0105	<0.005	< 0.003	<0.003	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	<0.01	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	0.267	0.264	0.0152	0.0117	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	<0.001	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	<0.005	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Manganese, Dissolved	mg/L	0.112	0.257	0.097	0.109	0.192	<0.02	0.0928	0.0908	0.0863	0.0875	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	0.123	0.111	0.0916	0.0781	0.0794	0.081	0.091
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.002	<0.002
Nickel, Total	mg/L	-	-	-	-	-	-	-	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<1	<1	< 1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	< 1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.029	<0.011
Five Year Parameters															
TAL Inorganics															
Chloride	mg/L	-	-	-	-	-	58	-	-	-	58	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.02	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	56	-	-	-	-	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	0.211	-	-	-	0.135	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	<0.001	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	116	-	-	-	98.7	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	<0.025	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	1.55	-	-	-	1.14	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	<0.003	-	-	-	0.000219	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	34.4	-	-	-	31.4	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	<0.0002	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	12	-	-	-	8.81	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	<0.005	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	<0.0005	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	45.6	-	-	-	30.8	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	<0.002	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	<0.02	-	-	-	<0.006	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	0.146	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	105	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	1.39	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	33	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Total	mg/L	-	-	-	-	-	-	-	-	-	9.95	-	-	-	-
Selenium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Silver, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-
Sodium, Total	mg/L	-	-	-	-	-	-	-	-	-	31.4	-	-	-	-
Thallium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Vanadium, Total	mg/L	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Zinc, Total	mg/L	-	-	-	-	-	-	-	-	-	0.00508	-	-	-	-
TCL VOCs*															
TCL VOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL SVOCs*															
TCL SVOCs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL Pesticides*															
TCL Pesticides*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
TCL PCBs*															
TCL PCBs*	ug/L	-	-	-	-	-	ND	-	-	-	ND	-	-	-	-
Field Parameters															
pH	S.U.	7.13	7.25	7.26	7.31	7.41	7.23	7.43	6.68	6.72	6.77	7.32	7.07	6.78	7.33
Conductivity	umhos/cm	1015	887	935	870	878	872	940	880	878	934	921	941	892	828
Temperature	°C	15.5	15.3	11.8	11.5	11.4	11.3	10.6	10.9	12.1	11.4	10.8	11.8	11.3	8.3
eH	millivts	18	-60	-	56	-	-	-83	-87	-69	-70	-116	-83	-114	-72
Dissolved Oxygen	mg/L	2.07	5.02	-	2.02	-	-	5.11	1.12	1.46	0.55	0.89	0.93	0	0
Turbidity	NTU	-	-	-	-	-	-	-	2	92	53	4	1	1	7
Supplemental Parameters															
Total Dissolved Solids	mg/L	556	534	528	502	496	439	360	570	524	616	-	-	-	-
Total Suspended Solids	mg/L	-	-	-	-	-	-	-	-	-	7	<5	5	<4	<4

NOTES:

(TAL) Target Analyte List from Table 7-5 of the Remedial Action Quality Assurance Project Plan (WCC, 1996) (RA QAPP) for the Albion Landfill.

(TCL) Target Compound List from Table 7-4 of the RA QAPP for the Albion Landfill.

(*) All TCL parameters listed on Table 7-4 of the RA QAPP were analyzed.

Only those parameters reported at or above the laboratory practical quantitation limit are listed.

(B) Parameter was reported above the PQL in field blank during this event.

(-) Not Tested

(#) Duplicate sample

(ND) Non-detect, i.e. not reported at or above the laboratory practical quantitation limit.

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 18

ANALYTICAL SUMMARY TABLE
MONITORING WELL MW-17B (FORMERLY RESIDENTIAL WELL RW-07)

PARAMETER	UNITS	02/03/00	02/03/00#	4/19/00	4/19/00#	04/19/00	04/19/00#	07/20/00	10/24/00	04/18/01	10/24/01	10/30/02	10/30/02#	10/21/04	1/11/06	09/28/06	09/28/06#	11/27/07	10/09/08	08/27/09	8/27/09#	11/18/09	11/09/10	11/08/11	11/15/12	11/12/13
Quarterly/Annual Parameters																										
Nitrogen, Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	0.17	0.3	0.31	0.2	<0.05	<0.05	<0.05	<0.05	< 0.05	-	-	0.069	0.24 ^B	0.082	<0.2	0.41
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	< 0.003	< 0.003	<0.003	-	-	-	
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	0.0117	< 0.003	< 0.003	<0.003	<0.003	<0.003	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	< 0.02	< 0.01	< 0.01	<0.01	-	-	-	
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	0.0675	< 0.01	< 0.01	<0.01	<0.01	<0.02	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	< 0.001	< 0.001	< 0.001	<0.001	-	-	-	
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	< 0.001	< 0.001	< 0.001	<0.001	<0.001	<0.002	<0.002	
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	-	-	-	
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	< 0.005	< 0.005	<0.005	<0.005	<0.001	<0.001	
Manganese, Dissolved	mg/L	0.034	0.034	0.042	0.04	0.042	0.04	<0.02	0.04	0.091	<0.02	0.028	0.029	<0.02	0.024	0.0333	0.0334	0.0759	0.101	0.0307	0.0291	0.106	-	-	-	
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	0.435	0.103	0.103	0.162	0.128	0.144	0.11	0.15
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	-	-	-	
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.006	< 0.005	< 0.005	<0.005	<0.005	<0.005	<0.002	<0.002
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<1	<1	<1	< 1	-	-	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	< 1	-	-	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.02	<0.02	<0.02	< 0.02	-	-	<0.02	<0.02	<0.02	<0.029	<0.011
Five Year Parameters																										
TAL Inorganics																										
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-	-	-	68.3	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	<0.005	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.56	-	-	-	-	-	-	0.0473	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	37	-	-	-	-	-	-	62	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	0.0927	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.0002	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-	-	-	-	-	105	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	<0.001	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.025	-	-	-	-	-	-	<0.001	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	1.14	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	-	-	-	-	-	-	<0.0002	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	25.2	-	-	-	-	-	-	31.3	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	<0.0002	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	1.32	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	<0.002	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	-	-	<0.0001	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	38.6	-	-	-	-	-	-	29.9	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-	<0.0002	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	<0.002	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	<0.005	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.113	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	116	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.05	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.4	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-											

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 19

ANALYTICAL SUMMARY TABLE
RESIDENTIAL WELL RW-04

PARAMETER	UNITS	10/28/99	2/03/00	4/19/00	04/19/00	07/20/00	10/24/00	04/18/01	10/24/01	10/30/02	10/09/03	10/21/04	1/11/06	09/28/06	11/27/07	10/09/08	10/09/08 #	11/18/09	11/09/10	11/08/11	11/08/11#	11/15/12	11/15/12#	11/12/13	11/12/13#
Quarterly/Annual Parameters																									
Nitrogen, Ammonia	mg/L	0.23	0.15	0.26	0.26	0.4	<0.05	1	1.09	0.73	0.53	0.22	0.21	0.396	0.209	0.094	0.112	0.211	0.184 ^B	0.146	0.139	0.2	<0.20	<0.2	<0.2
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.003	< 0.003	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.003	< 0.003	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	< 0.02	< 0.02	<0.01	-	-	-	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	< 0.02	< 0.02	<0.01	<0.01	<0.02	<0.02	<0.05 ^B	<0.05 ^B	<0.05 ^B	<0.05 ^B
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	< 0.001	< 0.001	<0.001	<0.001	-	-	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	< 0.001	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	< 0.005	< 0.005	<0.005	<0.005	-	-	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	0.082	0.052	0.054	0.054	0.059	<0.02	0.056	0.059	0.063	0.056	0.051	0.06	0.0522	0.0614	0.0538	0.0539	0.0706	-	-	-	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0569	0.0516	0.0538	0.0727	0.0575	0.0622	0.0617	0.064	0.063	0.067	0.077
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	< 0.005	< 0.005	<0.006	<0.005	<0.006	<0.006	<0.002	<0.002	<0.002	<0.002
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.006	< 0.005	< 0.006	<0.0055	<0.005	<0.006	<0.006	<0.002	<0.002	<0.002	<0.002
Benzene	ug/L	<5	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<1	<1	< 1	< 1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	< 1	< 1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.02	<0.02	< 0.02	< 0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.03	<0.011	<0.011
Five Year Parameters																									
TAL Inorganics																									
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	52	-	-	-	-	66.4	-	-	-	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.005	-	-	-	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.02	-	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	43	-	-	-	-	58.2	-	-	-	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	0.0808	-	-	-	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	<0.0002	-	-	-	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0002	-	-	-	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	111	-	-	-	-	109	-	-	-	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.001	-	-	-	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.025	-	-	-	-	<0.001	-	-	-	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	0.93	-	-	-	-	0.811	-	-	-	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.003	-	-	-	-	0.000241	-	-	-	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	30.6	-	-	-	-	32	-	-	-	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	<0.0002	-	-	-	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	1.58	-	-	-	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.002	-	-	-	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0001	-	-	-	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	30.6	-	-	-	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	<0.0002	-	-	-	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.002	-	-	-	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	0.0095	-	-	-	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0925	-	-	-	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	116	-	-	-	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.916	-	-	-	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.5	-	-	-	-	-	-	-
Mercury, Total</																									

ALBION-SHERIDAN TOWNSHIP LANDFILL
OPERATION AND MAINTENANCE MONITORING

TABLE 20

ANALYTICAL SUMMARY TABLE
RESIDENTIAL WELL RW-06

PARAMETER	UNITS	11/2/99	2/03/00	4/19/00	04/19/00	07/20/00	07/20/00#	10/24/00	10/24/00#	04/18/01	04/18/01#	10/24/01	10/30/02	10/09/03	10/21/04	01/11/06	09/28/06	11/27/07	11/27/07#	10/09/08	11/18/09	11/09/10	11/09/10#	11/08/11	11/15/12 ²	11/11/13 ²
Quarterly/Annual Parameters																										
Nitrogen, Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.219 ^B	0.521 ^B	0.113	-	-
Arsenic, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003	-	-	-	-	-
Arsenic, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.02	<0.01	-	-	-	-	-
Aluminum, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.02	<0.01	<0.01	<0.01	<0.02	-	-
Antimony, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-
Antimony, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
Cobalt, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-
Cobalt, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Manganese, Dissolved	mg/L	0.036	0.047	0.05	0.05	0.037	0.038	0.046	0.05	0.062	0.064	0.028	0.037	0.042	0.051	0.076	0.0149	0.0248	0.0251	0.0156	0.0472	-	-	-	-	-
Manganese, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0237	0.0242	0.0151	0.0479	0.0176	0.0181	0.0673	-	-
Nickel, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.006	<0.005	<0.005	<0.005	<0.006	-	-	-	-	-
Nickel, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.0055	<0.005	<0.005	<0.005	<0.005	-
Benzene	ug/L	<5	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
1,2-Dibromo-3-Chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-
Five Year Parameters																										
TAL Inorganics																										
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89	-	-	-	-	98	-	-	-	-	-
Cyanide, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.005	-	-	-	-	-
Nitrate-Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	0.0226	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63	-	-	-	-	65.8	-	-	-	-	-
Barium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	0.074	-	-	-	-	-
Beryllium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	<0.0002	-	-	-	-	-
Cadmium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0002	-	-	-	-	-
Calcium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	132	-	-	-	-	112	-	-	-	-	-
Chromium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.001	-	-	-	-	-
Copper, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.025	-	-	-	-	0.00908	-	-	-	-	-
Iron, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	-	-	-	-	-
Lead, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	-	-	-	-	0.00112	-	-	-	-	-
Magnesium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.1	-	-	-	-	32.9	-	-	-	-	-
Mercury, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	<0.0002	-	-	-	-	-
Potassium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	1.92	-	-	-	-	-
Selenium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	<0.002	-	-	-	-	-
Silver, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	-	-	-	<0.0001	-	-	-	-	-
Sodium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53.3	-	-	-	-	56.5	-	-	-	-	-
Thallium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	<0.0002	-	-	-	-	-
Vanadium, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.002	-	-	-	-	-
Zinc, Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.006	-	-	-	-	-
Barium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0788	-	-	-	-	-
Beryllium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Cadmium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-
Calcium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	116	-	-	-	-	-
Chromium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-
Copper, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0103	-	-	-	-	-
Iron, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.408	-	-	-	-	-
Lead, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Magnesium, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.3	-	-	-	-	-
Mercury, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-

ALBION-SHERIDAN TOWNSHIP LANDFILL

OPERATION AND MAINTENANCE MONITORING

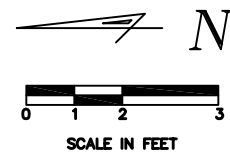
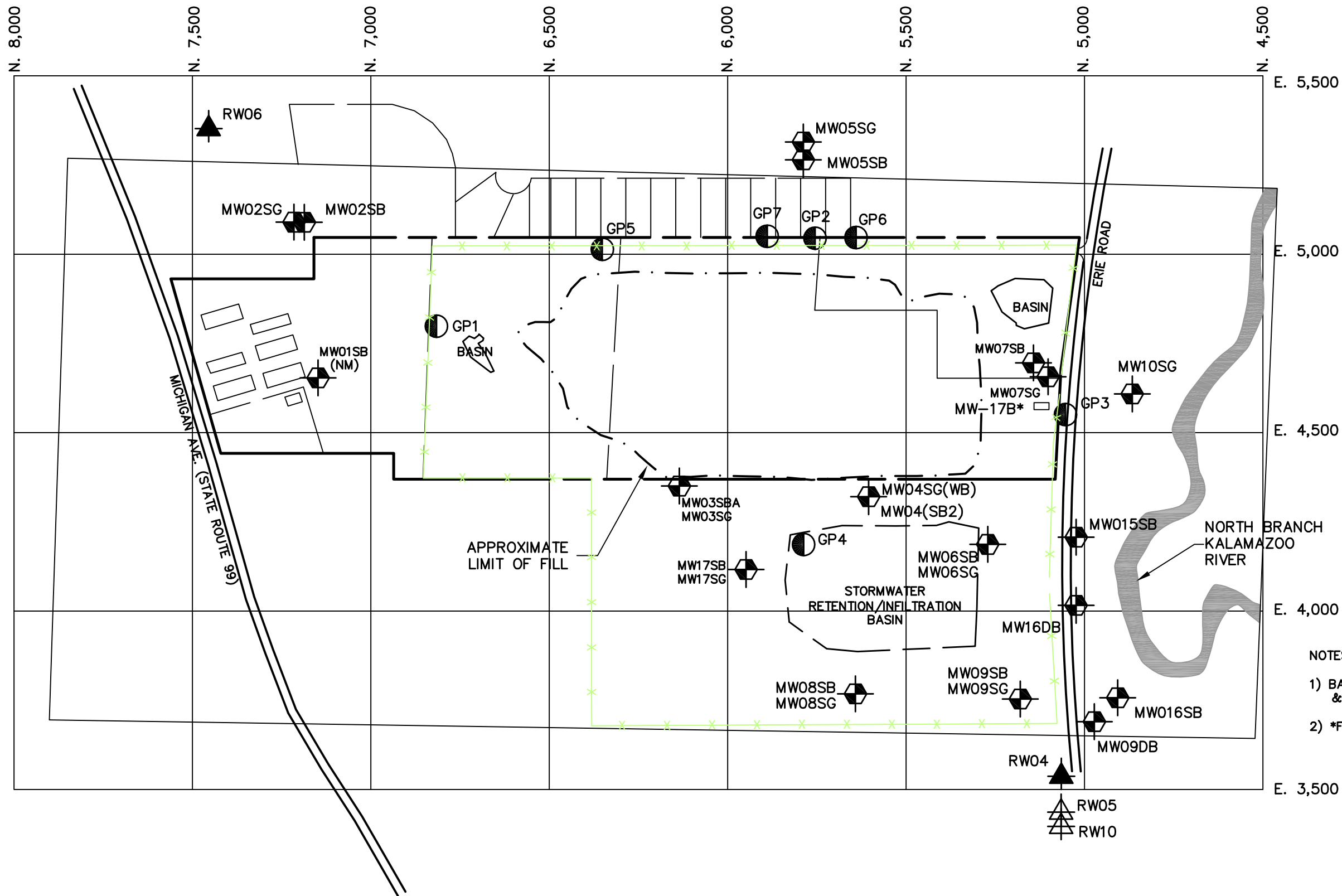
TABLE 21

SUMMARY OF GROUNDWATER ELEVATIONS¹ IN MONITORING WELLS

MONITORING WELL ID	10/27/99	1/25/00	4/19/00	7/20/00	10/24/00	01/24/01	10/23/01	10/29/02	10/5/03	10/20/04	01/10/06	09/27/06	11/26/07	10/7/08	11/17/09	11/3/10	11/07/11	11/14/12	11/11/13
UNCONSOLIDATED SATURATED UNIT																			
MW01SG	982.36	--	--	--	--	--	950.97	951.05	949.68	950.97	949.66	949.78	949.99	952.68	952.90	952.42	952.31	951.46	951.89
MW02SG	949.61	949.22	948.84	949.80	949.66	949.38	951.10	950.96	949.64	951.10	949.78	949.89	950.06	952.64	952.88	952.43	952.33	951.50	951.88
MW03SG	946.63	946.63	--	--	--	--	948.16	947.33	946.64	948.16	947.15	947.02	947.17	948.73	948.74	948.40	948.47	947.86	948.34
MW04SG(WB)	946.07	945.93	945.81	946.52	946.43	946.27	947.51	946.32	946.56	947.51	946.56	946.48	946.65	947.90	947.89	947.62	947.66	947.16	947.59
MW05SG	948.69	--	--	--	948.96	--	950.34	949.32	948.40	950.34	949.19	948.92	949.19	951.47	951.32	950.81	950.91	950.04	950.62
MW06SG	946.92	--	--	--	--	--	950.83	947.59	947.25	950.83	948.09	946.99	947.44	951.39	949.22	948.00	948.91	947.70	948.83
MW07SG	946.49	--	--	948.04	946.92	--	948.83	947.43	946.97	948.83	947.53	946.70	947.00	949.41	948.56	947.85	948.29	947.45	948.17
MW08SG	955.30	--	--	--	--	--	948.18	945.73	954.83	948.18	954.44	954.85	954.72	956.94	955.80	955.72	955.82	954.73	956.15
MW09SG	945.69	945.56	945.52	946.19	--	--	947.02	945.99	946.13	947.02	945.88	946.02	946.13	947.27	947.15	946.92	946.96	946.50	946.97
MW10SG	945.68	--	--	--	946.16	--	946.11	946.09	945.64	946.11	946.05	945.93	942.22	946.75	946.69	946.63	946.66	947.35	946.80
MW11SG	--	--	--	--	--	--	--	949.13	949.13	--	--	--	--	--	--	--	--	--	--
MW12SG	--	--	--	--	--	--	--	950.72	950.72	--	--	--	--	--	--	--	--	--	--
MW13SG	--	--	--	--	--	--	--	949.49	949.49	--	--	--	--	--	--	--	--	--	--
MM17SG							954.38	--	--	954.38	952.26	--	952.71	955.92	954.59	947.89	954.37	952.83	954.34
DEEP BEDROCK UNIT																			
MW04DB	945.24	945.88	945.66	946.51	--	946.18	947.81	947.94	947.17	947.81	946.76	946.76	946.90	948.91	948.98	948.67	948.68	948.08	948.50
MW16DB	--	--	--	--	946.27	--	947.06	946.96	946.43	947.06	946.51	946.43	946.48	947.89	947.89	947.71	948.16	947.33	947.71
SHALLOW BEDROCK UNIT																			
MW01SB	--	--	--	--	948.40	948.65	950.40	950.41	949.19	950.40	949.15	949.23	949.45	951.94	952.22	951.75	951.64	950.88	951.28
MW02SB	948.99	948.60	948.22	949.08	948.84	948.76	950.50	950.35	949.10	950.50	949.15	949.28	949.50	951.98	952.23	951.78	951.72	950.92	951.29
MW03SBA	946.16	946.00	945.90	946.60	946.50	946.35	947.64	946.98	946.26	947.64	946.67	946.60	946.74	948.04	948.03	947.71	947.73	947.24	947.66
MW04SB(SB2)	946.07	945.91	954.80	946.51	946.44	946.28	947.51	947.09	946.55	947.51	946.58	946.49	946.65	947.88	947.88	947.59	947.64	947.13	947.56
MW05SB	946.95	--	946.43	947.25	947.18	946.98	948.57	947.82	947.02	948.57	947.46	947.46	947.65	949.66	949.68	949.39	949.39	948.69	949.12
MW06SB	946.08	945.93	--	946.45	946.38	946.26	947.49	946.97	946.50	947.49	946.56	946.48	946.62	947.88	947.86	947.59	947.65	947.07	947.57
MW07SB	946.02	945.85	945.75	946.55	946.48	946.33	947.54	947.05	946.59	947.54	946.44	946.52	946.69	947.92	947.95	947.65	947.69	947.19	947.63
MW08SB	946.10	--	945.82	946.57	946.48	946.32	947.56	947.06	946.54	947.56	946.65	946.55	946.71	947.96	947.95	947.67	947.73	947.22	947.67
MW09SB	946.06	945.90	945.78	946.42	946.21	946.19	947.41	946.94	946.48	947.41	946.49	946.41	946.57	947.81	947.79	947.52	947.57	947.08	947.51
MW15SB	--	--	--	946.17	946.10	945.95	947.05	946.52	946.04	947.05	946.21	946.11	946.22	947.30	947.22	946.99	947.06	946.63	947.08
MW16SB	--	--	--	--	946.14	946.02	947.47	946.57	946.12	947.47	946.20	945.15	946.28	947.29	947.28	947.05	947.09	946.67	947.10
MW17SB							947.55	--	--	947.55	946.63	946.56	946.71	947.94	947.93	947.66	947.70	947.19	947.65
WEATHERED BEDROCK UNIT																			
MW01WB	--	--	--	--	--	--	950.45	950.43	949.19	950.45	949.17	949.27	949.43	951.98	952.22	951.77	951.70	950.91	951.27
MW02WB	949.33	948.95	948.57	949.43	--	949.08	950.78	950.64	949.37	950.78	949.49	949.61	949.80	952.34	952.57	952.13	952.06	951.24	951.62
MW03WB	946.08	946.08	--	--	--	--	947.48	946.80	946.34	947.48	946.58	946.51	946.66	947.81	947.89	947.65	947.67	947.16	947.59
MW04WB(SB1)	946.07	945.93	945.82	946.52	--	946.26	947.51	947.15	946.66	947.51	946.56	946.47	946.64	947.88	947.89	947.61	947.65	947.16	947.60
MW06WB	945.70	--	--	--	--	--	946.94	946.44	946.02	946.94	946.08	946.00	946.13	947.16	947.15	946.89	946.96	946.53	946.96
MW07WB	946.01	--	--	946.54	--	--	947.56	947.04	946.55	947.56	946.65	946.53	946.71	947.95	947.96	947.66	947.69	947.22	947.67
MW08WB	946.14	--	--	--	--	946.40	947.82	947.29	946.62	947.82	946.76	946.75	946.87	948.56	948.49	948.22	948.28	947.70	948.21
MW09WB	945.72	945.58	945.52	946.11	--	--	947.00	946.60	946.16	947.00	946.12	946.05	946.17	947.24	947.18	946.94	947.01	946.59	947.01

Notes: 1) All groundwater elevation data are in ft./USGS.
2) Fluctuations listed represent maximum variations of ground-water elevations recorded on consecutive sampling events.
(-) Not Available

FIGURES AND PLATES



LEGEND

- GP GAS PROBE
- MW GROUNDWATER MONITORING WELL
- RW DRINKING WATER WELL
- RW ALTERNATE DRINKING WATER WELL
- PERIMETER FENCE

NOTES:

- 1) BASE MAP CREATED FROM WW ENGINEERING & SCIENCE REPORT DATED JULY 1994.
- 2) *FORMERLY RESIDENTIAL WELL RW-07.



**BROWNFIELDS
SHALE OIL & GAS
WASTE MANAGEMENT
ENVIRONMENTAL
ALTERNATIVE ENERGY**

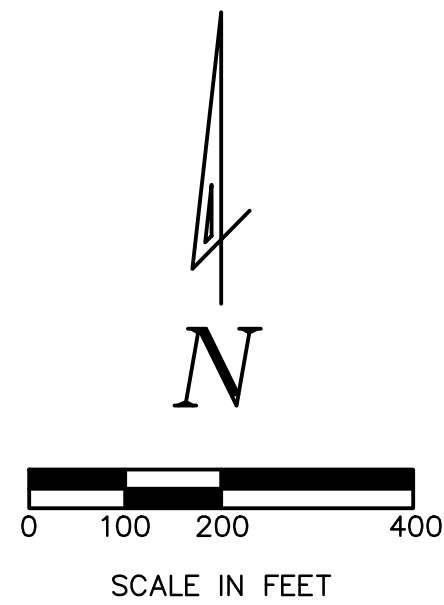
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3401 Glendale Ave.
Suite 300
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Phone: (419) 385-2018
Fax: (419) 385-5487
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ALBION-SHERIDAN TOWNSHIP LANDFILL

**FIGURE 1
MONITORING/RESIDENTIAL WELL
LOCATION MAP**

SHERIDAN TOWNSHIP, CALHOUN COUNTY, MICHIGAN

PROJECT NO.: ALB039	SUBMITTAL DATE: MARCH 2014
CAD DWG FILE: ALB039.100.0011 SAH	PLOT DATE: 3/25/14



LEGEND

- PROPERTY LINE
--- PARCEL LINES
--- APPROXIMATE LIMIT OF FILL
x x x x FENCE
MW06SB GROUNDWATER MONITORING WELL
RW04 RESIDENTIAL WATER WELL
FLOODPLAIN
AREAS REQUIRING INSTITUTIONAL CONTROLS
EXTENT OF GROUNDWATER WITH ARSENIC CONCENTRATIONS REPORTED ABOVE 0.01 mg/L DURING THE CURRENT MONITORING EVENT
0.05 ARSENIC CONCENTRATION (mg/L) CONTOURS
0.05 INFERRED CONCENTRATION (mg/L) CONTOURS
EXISTING USE RESTRICTION RECORDED RESTRICTING USE OF GROUNDWATER, DEVELOPMENT (AREA COVERED BY THE LANDFILL CAP) FOR RESIDENTIAL, COMMERCIAL OR AGRICULTURAL USE, AND DISRUPTION OF THE CONTAINMENT OR MONITORING SYSTEM OR OTHER RESPONSE ACTION.
PERIMETER FENCE RESTRICTING SITE ACCESS
EXISTING LANDFILL CAP COMPRISED OF FLEXIBLE MEMBRANE LINER AND SOIL COVER

MONITORING WELL ID	TOTAL ARSENIC CONCENTRATION (mg/L)
MW02SB	<0.005
MW03SBA	<0.005
MW04SB	0.006
MW05SB	<0.005
MW06SB	<0.005
MW07SB	<0.005
MW08SB	<0.005
MW09SB	<0.005
MW15SB	0.074
MW16SB	<0.005
MW17B **	<0.005
RW04	<0.005
RW06 ³	--

** FORMERLY RESIDENTIAL RW-07
ARSENIC CONCENTRATIONS REPORTED FOR WELLS SAMPLED ON 11/12/13
-- NOT SAMPLED

NOTES:

- 1) BASE MAP CREATED FROM VW ENGINEERING & SCIENCE REPORT DATED JULY 1994. THE OWNERSHIP OF THE CENTRAL PORTION OF THE LANDFILL IS UNCLEAR. CONFLICTING SOURCES OF INFORMATION WERE OBTAINED; ONE SOURCE NAMING ENVIRONMENTAL RESOURCE RECOVERY, INC. AS THE PROPERTY OWNER, AND THE OTHER SOURCE NAMING THE STATE OF MICHIGAN AS THE PROPERTY OWNER.
- 2) THE PROPERTY OWNERSHIP FOR PARCELS 362-036-00 AND 362-045-00 IS CURRENTLY BEING EVALUATED BY THE CALHOUN COUNTY TREASURER'S OFFICE/LAND BANK AUTHORITY. AT THIS TIME, CALHOUN COUNTY IS BELIEVED TO BE THE OWNER FOR THESE PARCELS.
- 3) A GROUNDWATER SAMPLE WAS NOT COLLECTED FROM RESIDENTIAL WELL RW-06 DUE TO LACK OF ACCESS TO THE PROPERTY.

Project Title:

**ALBION - SHERIDAN TOWNSHIP LANDFILL
SHERIDAN TWP., CALHOUN CO., MICHIGAN**

Owner:

**ALBION-SHERIDAN
TOWNSHIP**

B SHERIDAN TWP., MICHIGAN

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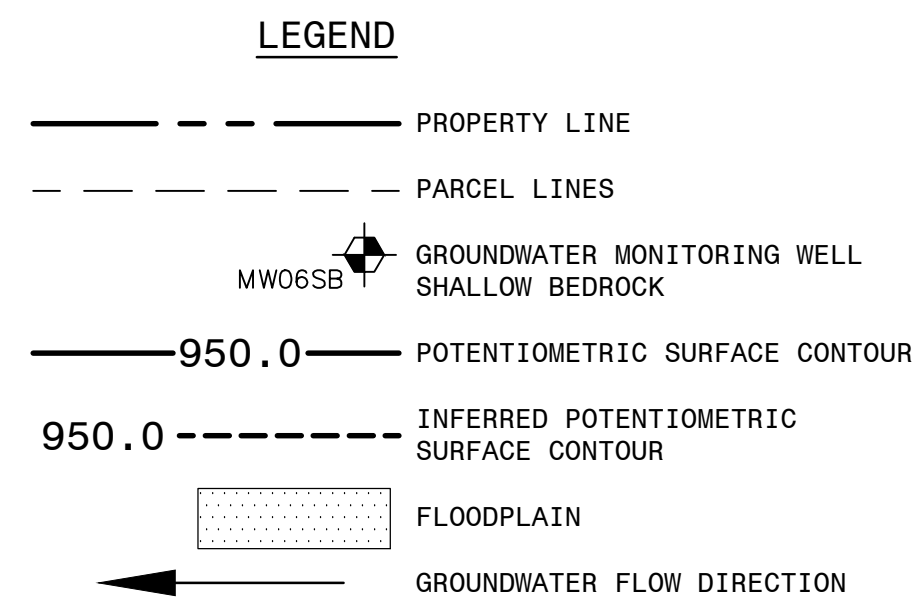
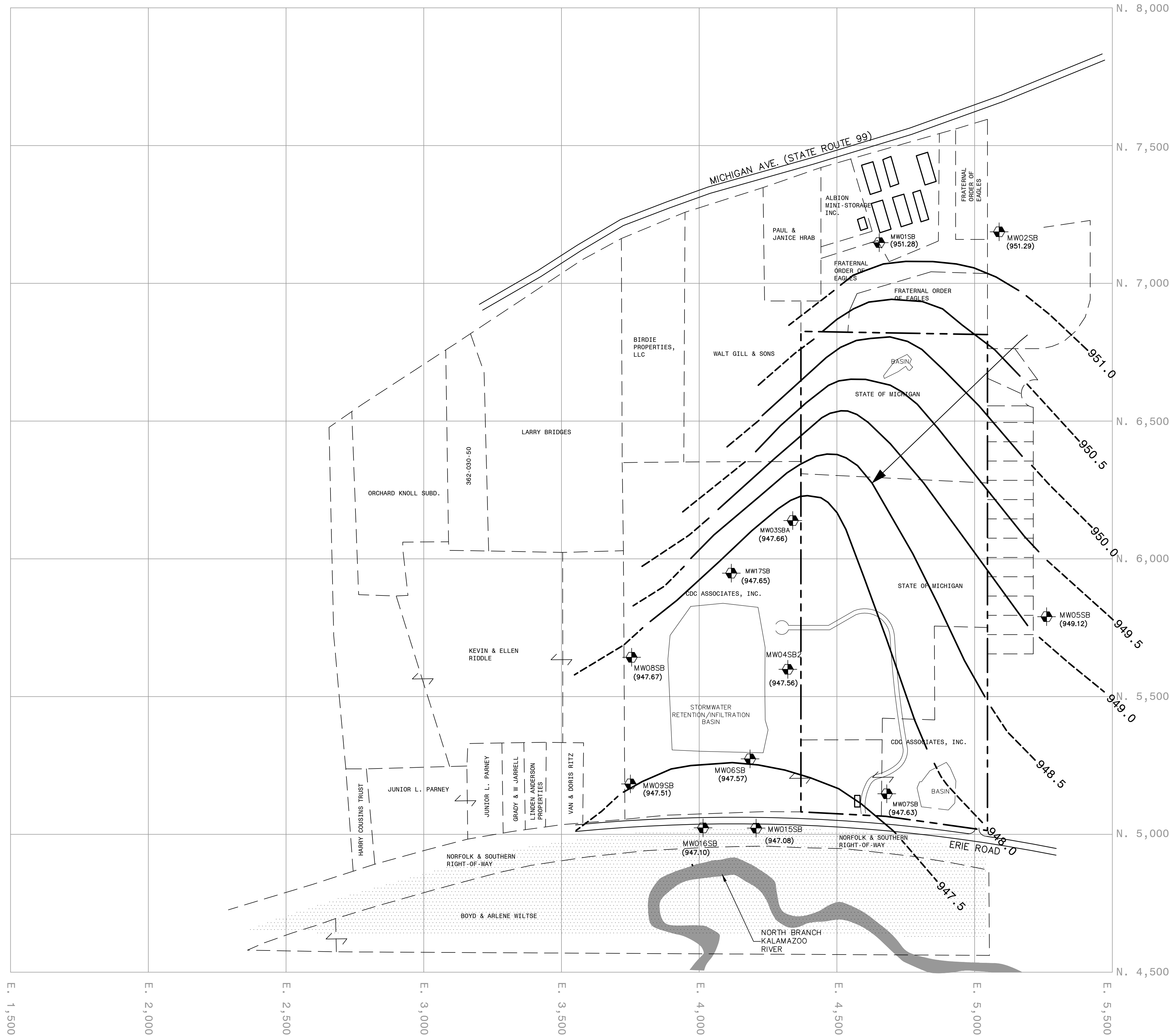
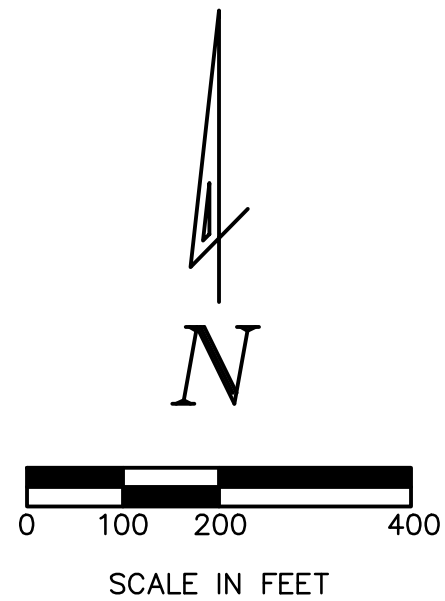
Mark	Description	Date

Project No.: ALB039
CAD DWG File: ALB039.100.0012
Plot Date: 3/25/14
Layout By: JR
Drawn By: GAC/SAH
Check By: JM
Scale: 1"=200'
Issue Date: MARCH 2014

Sheet Title: **PLATE 1
ALBION-SHERIDAN
TOWNSHIP LANDFILL
ARSENIC
ISOCONCENTRATION MAP
FOR THE SHALLOW
BEDROCK**

Sheet Number: 1 OF 1

C-101



WELL ID.	GROUNDWATER ELEV. (FT/UGS)
MW01SB	951.28
MW02SB	951.29
MW03SBA	947.66
MW04SB(SB2)	947.56
MW05SB	949.12
MW06SB	947.57
MW07SB	947.63
MW08SB	947.67
MW09SB	947.51
MW15SB	947.08
MW16SB	947.10
MW17SB	947.65

AVERAGE HYDRAULIC GRADIENT = 0.002 FT/FT
MAJOR FLOW DIRECTION = SOUTHWEST
CONTOUR GRADIENT = 0.5 FT.
WATER LEVELS MEASURED ON 11/11/13

NOTE:
BASE MAP CREATED FROM WW ENGINEERING & SCIENCE REPORT DATED JULY 1994. THE OWNERSHIP OF THE CENTRAL PORTION OF THE LANDFILL IS UNCLEAR. CONFLICTING SOURCES OF INFORMATION WERE OBTAINED; ONE SOURCE NAMING ENVIRONMENTAL RESOURCE RECOVERY, INC. AS THE PROPERTY OWNER, AND THE OTHER SOURCE NAMING THE STATE OF MICHIGAN AS THE PROPERTY OWNER.

**ALBION - SHERIDAN TOWNSHIP LANDFILL
SHERIDAN TWP., CALHOUN CO., MICHIGAN**

Owner:
**ALBION - SHERIDAN
TOWNSHIP**

SHERIDAN TWP., MICHIGAN

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Mark	Description	Date

Project No.:	ALB039
CAD DWG File:	ALB039.100.0010
Plot Date:	3/25/14
Layout By:	JR
Drawn By:	GAC/SAH
Check By:	JM
Scale:	1"=200'
Issue Date:	MARCH 2014
Sheet Title:	

**PLATE 2
ALBION-SHERIDAN
TOWNSHIP LANDFILL
POTENTIOMETRIC SURFACE
MAP FOR THE SHALLOW
BEDROCK UNIT**

Sheet Number: **1 OF 1**

APPENDIX A

Laboratory Analytical and Quality Control Reports
including Chain of Custody and Request for Analysis Forms

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-31386-1
Client Project/Site: Albion-Sheridan Landfill

For:
Hull & Associates, Inc.
3401 Glendale Ave
Suite 300
Toledo, Ohio 43614

Attn: Ryan Murphy



Authorized for release by:
11/27/2013 4:19:07 PM

Josh McKinney, Project Manager II
(937)294-6856
josh.mckinney@testamericainc.com

LINKS

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results through
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? Ask
The
Expert

Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Qualifiers

Metals

Qualifier	Qualifier Description
A	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
A	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
■	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Canton

Case Narrative

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Job ID: 240-31386-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-31386-1

Comments

No additional comments.

Receipt

The samples were received on 11/13/2013 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 1.2° C, 1.2° C, 1.4° C, 1.8° C and 2.6° C.

GC/MS VOA

No analytical or quality issues were noted.

GC Semi VOA

Method(s) 8011: All primary data is reported from the RTX-CLPI column.

No other analytical or quality issues were noted.

Metals

Method(s) 6020: The continuing calibration verification (CCV) for Manganese associated with batch 110475 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. ALB039:FB2:W111213 (240-31386-23)

No other analytical or quality issues were noted.

Field Service / Mobile Lab

No analytical or quality issues were noted.

General Chemistry

Method(s) 350.3: The continuing calibration verification (CCV) for ammonia associated with batch 110118 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Method Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL CAN
160.2	Solids, Total Suspended (TSS)	MCAWW	TAL CAN
350.3	Nitrogen, Ammonia	MCAWW	TAL CAN
Field Sampling	Field Sampling	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Canton

Sample Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-31386-1	ALB039:MW2SG:G111113	Water	11/11/13 09:03	11/13/13 09:15
240-31386-2	ALB039:MW2SB:G111113	Water	11/11/13 09:28	11/13/13 09:15
240-31386-3	ALB039:MW3SBA:G111113	Water	11/11/13 09:59	11/13/13 09:15
240-31386-4	ALB039:MW4SG:G111113	Water	11/11/13 10:27	11/13/13 09:15
240-31386-5	ALB039:MW4SB:G111113	Water	11/11/13 10:55	11/13/13 09:15
240-31386-6	ALB039:MW8SB:G111113	Water	11/11/13 11:28	11/13/13 09:15
240-31386-7	ALB039:MW9SB:G111113	Water	11/11/13 12:03	11/13/13 09:15
240-31386-8	ALB039:MW6SB:G111113	Water	11/11/13 12:38	11/13/13 09:15
240-31386-9	ALB039:MW10SG:G111113	Water	11/11/13 12:53	11/13/13 09:15
240-31386-10	ALB039:MW5SG:G111113	Water	11/11/13 13:29	11/13/13 09:15
240-31386-11	ALB039:MW5SB:G111113	Water	11/11/13 13:55	11/13/13 09:15
240-31386-12	ALB039:FBI:G111113	Water	11/11/13 14:10	11/13/13 09:15
240-31386-13	ALB039:MW7SB:G111213	Water	11/12/13 07:19	11/13/13 09:15
240-31386-14	ALB039:TBI:W111213	Water	11/12/13 00:00	11/13/13 09:15
240-31386-15	ALB039:MW7SB:G111213A	Water	11/12/13 07:19	11/13/13 09:15
240-31386-16	ALB039:MW7SG:G111213	Water	11/12/13 07:56	11/13/13 09:15
240-31386-17	ALB039:MW7SG:G111213A	Water	11/12/13 07:56	11/13/13 09:15
240-31386-18	ALB039:MW17B:G111213	Water	11/12/13 08:31	11/13/13 09:15
240-31386-19	ALB039:MW15SB:G111213	Water	11/12/13 09:04	11/13/13 09:15
240-31386-20	ALB039:MW16SB:G111213	Water	11/12/13 09:32	11/13/13 09:15
240-31386-21	ALB039:MW16DB:G111213	Water	11/12/13 09:55	11/13/13 09:15
240-31386-22	ALB039:MW9DB:G111213	Water	11/12/13 10:26	11/13/13 09:15
240-31386-23	ALB039:FB2:W111213	Water	11/12/13 11:10	11/13/13 09:15
240-31386-24	ALB039:RW4:W111213	Water	11/12/13 10:45	11/13/13 09:15
240-31386-25	ALB039:RW4:W111213A	Water	11/12/13 10:45	11/13/13 09:15

TestAmerica Canton

Detection Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW2SG:G111113

Lab Sample ID: 240-31386-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance by SM2510B	605				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	6.28				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	10.7				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.02				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	189				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW2SB:G111113

Lab Sample ID: 240-31386-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	360		5.0		ug/L	1		6020	Total Recoverable
Specific Conductance by SM2510B	950				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	11.1				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.24				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	47				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW3SBA:G111113

Lab Sample ID: 240-31386-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	74		5.0		ug/L	1		6020	Total Recoverable
Total Suspended Solids	16		4.0		mg/L	1		160.2	Total/NA
Ammonia (as N)	0.25		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	879				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	11.0				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.48				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	20				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW4SG:G111113

Lab Sample ID: 240-31386-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	210		50		ug/L	1		6020	Total Recoverable
Arsenic	24		5.0		ug/L	1		6020	Total Recoverable
Manganese	220		5.0		ug/L	1		6020	Total Recoverable
Ammonia (as N)	0.28		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	394				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	11.6				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.14				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	68				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW4SB:G111113

Lab Sample ID: 240-31386-5

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW4SB:G111113 (Continued)

Lab Sample ID: 240-31386-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.0		5.0		ug/L	1		6020	Total
									Recoverable
Manganese	41		5.0		ug/L	1		6020	Total
									Recoverable
Nickel	3.8		2.0		ug/L	1		6020	Total
									Recoverable
Total Suspended Solids	69		4.0		mg/L	1		160.2	Total/NA
Ammonia (as N)	13		2.0		mg/L	10		350.3	Total/NA
Specific Conductance by SM2510B	5880				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	6.17				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	10.5				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	12.83				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-102				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW8SB:G111113

Lab Sample ID: 240-31386-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	58		50		ug/L	1		6020	Total
									Recoverable
Manganese	47		5.0		ug/L	1		6020	Total
									Recoverable
Specific Conductance by SM2510B	471				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	10.5				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.36				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	80				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW9SB:G111113

Lab Sample ID: 240-31386-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	69		5.0		ug/L	1		6020	Total
									Recoverable
Ammonia (as N)	4.7		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	828				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	9.5				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.45				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-89				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW6SB:G111113

Lab Sample ID: 240-31386-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	65		50		ug/L	1		6020	Total
									Recoverable
Manganese	72		5.0		ug/L	1		6020	Total
									Recoverable
Ammonia (as N)	1.2		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	913				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	8.5				Celsius	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW6SB:G111113 (Continued)

Lab Sample ID: 240-31386-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field pH by SM4500-H B	7.50				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-89				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW10SG:G111113

Lab Sample ID: 240-31386-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1300		50		ug/L	1		6020	Total
Manganese	150		5.0		ug/L	1		6020	Total
Total Suspended Solids	79		4.0		mg/L	1		160.2	Total/NA
Ammonia (as N)	1.9		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	790				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	na				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	9.5				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.97				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	na				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW5SG:G111113

Lab Sample ID: 240-31386-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	380		5.0		ug/L	1		6020	Total
Specific Conductance by SM2510B	988				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	10.4				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.55				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-64				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW5SB:G111113

Lab Sample ID: 240-31386-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance by SM2510B	879				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	6.41				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	10.0				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	9.62				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	12				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:FBI:G111113

Lab Sample ID: 240-31386-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	94		50		ug/L	1		6020	Total
									Recoverable

Client Sample ID: ALB039:MW7SB:G111213

Lab Sample ID: 240-31386-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	24		5.0		ug/L	1		6020	Total
									Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SB:G111213 (Continued)

Lab Sample ID: 240-31386-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance by SM2510B	610				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	1.18				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	11.1				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.30				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	116				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:TBI:W111213

Lab Sample ID: 240-31386-14

No Detections.

Client Sample ID: ALB039:MW7SB:G111213A

Lab Sample ID: 240-31386-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	18		5.0		ug/L	1		6020	Total Recoverable
Specific Conductance by SM2510B	610				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	1.18				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	11.1				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.30				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	116				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW7SG:G111213

Lab Sample ID: 240-31386-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.0		5.0		ug/L	1		6020	Total Recoverable
Cobalt	2.6		1.0		ug/L	1		6020	Total Recoverable
Manganese	710		5.0		ug/L	1		6020	Total Recoverable
Nickel	3.4		2.0		ug/L	1		6020	Total Recoverable
Ammonia (as N)	2.1		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	658				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	9.3				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.89				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-50				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW7SG:G111213A

Lab Sample ID: 240-31386-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	2.6		1.0		ug/L	1		6020	Total Recoverable
Manganese	740		5.0		ug/L	1		6020	Total Recoverable
Nickel	3.3		2.0		ug/L	1		6020	Total Recoverable
Ammonia (as N)	2.2		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	658				umhos/cm	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SG:G111213A (Continued)

Lab Sample ID: 240-31386-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	9.3				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.89				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-50				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW17B:G111213

Lab Sample ID: 240-31386-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	150		5.0		ug/L	1		6020	Total Recoverable
Total Suspended Solids	10		4.0		mg/L	1		160.2	Total/NA
Ammonia (as N)	0.41		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	268				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	5.18				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	7.9				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.90				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-222				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW15SB:G111213

Lab Sample ID: 240-31386-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	74		5.0		ug/L	1		6020	Total Recoverable
Manganese	160		5.0		ug/L	1		6020	Total Recoverable
Ammonia (as N)	3.5		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	821				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	7.4				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.28				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-99				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW16SB:G111213

Lab Sample ID: 240-31386-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	91		5.0		ug/L	1		6020	Total Recoverable
Ammonia (as N)	2.6		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	828				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	8.3				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.33				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-72				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW16DB:G111213

Lab Sample ID: 240-31386-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	39		5.0		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW16DB:G111213 (Continued)

Lab Sample ID: 240-31386-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ammonia (as N)	0.54		0.20		mg/L	1		350.3	Total/NA
Specific Conductance by SM2510B	616				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	7.9				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	8.63				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-72				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:MW9DB:G111213

Lab Sample ID: 240-31386-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	91		5.0		ug/L	1		6020	Total Recoverable
Specific Conductance by SM2510B	639				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	0				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	8.3				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	7.32				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-51				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:FB2:W111213

Lab Sample ID: 240-31386-23

No Detections.

Client Sample ID: ALB039:RW4:W111213

Lab Sample ID: 240-31386-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	67		5.0		ug/L	1		6020	Total Recoverable
Specific Conductance by SM2510B	832				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	8.62				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	12.3				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.95				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-71				millivolts	1		Field Sampling	Total/NA

Client Sample ID: ALB039:RW4:W111213A

Lab Sample ID: 240-31386-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	77		5.0		ug/L	1		6020	Total Recoverable
Specific Conductance by SM2510B	832				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved by SM4500 O-G	8.62				mg/L	1		Field Sampling	Total/NA
Field Temperature by Sm2550B	12.3				Celsius	1		Field Sampling	Total/NA
Field pH by SM4500-H B	6.95				SU	1		Field Sampling	Total/NA
Oxidation Reduction Potential by ASTM1498	-71				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW2SG:G111113

Lab Sample ID: 240-31386-1

Date Collected: 11/11/13 09:03

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/20/13 18:40	1
Vinyl chloride	<1.0		1.0		ug/L			11/20/13 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129		11/20/13 18:40	1
4-Bromofluorobenzene (Surr)	89		66 - 117		11/20/13 18:40	1
Toluene-d8 (Surr)	90		74 - 115		11/20/13 18:40	1
Dibromofluoromethane (Surr)	91		75 - 121		11/20/13 18:40	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 13:20	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 20:04	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:04	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:04	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:04	1
Manganese	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:04	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20		0.20		mg/L			11/15/13 10:41	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	605				umhos/cm			11/11/13 09:03	1
Oxygen, Dissolved by SM4500 O-G	6.28				mg/L			11/11/13 09:03	1
Field Temperature by SM2550B	10.7				Celsius			11/11/13 09:03	1
Field pH by SM4500-H B	7.02				SU			11/11/13 09:03	1
Oxidation Reduction Potential by ASTM1498	189				millivolts			11/11/13 09:03	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW2SB:G111113

Lab Sample ID: 240-31386-2

Date Collected: 11/11/13 09:28

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/20/13 19:02	1
Vinyl chloride	<1.0		1.0		ug/L			11/20/13 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 129		11/20/13 19:02	1
4-Bromofluorobenzene (Surr)	85		66 - 117		11/20/13 19:02	1
Toluene-d8 (Surr)	88		74 - 115		11/20/13 19:02	1
Dibromofluoromethane (Surr)	88		75 - 121		11/20/13 19:02	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 13:46	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 20:20	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:20	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:20	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:20	1
Manganese	360		5.0		ug/L		11/14/13 08:53	11/18/13 20:20	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20		0.20		mg/L			11/15/13 10:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	950				umhos/cm			11/11/13 09:28	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/11/13 09:28	1
Field Temperature by SM2550B	11.1				Celsius			11/11/13 09:28	1
Field pH by SM4500-H B	6.24				SU			11/11/13 09:28	1
Oxidation Reduction Potential by ASTM1498	47				millivolts			11/11/13 09:28	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW3SBA:G111113

Lab Sample ID: 240-31386-3

Date Collected: 11/11/13 09:59

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/20/13 19:25	1
Vinyl chloride	<1.0		1.0		ug/L			11/20/13 19:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		63 - 129					11/20/13 19:25	1
4-Bromofluorobenzene (Surr)	92		66 - 117					11/20/13 19:25	1
Toluene-d8 (Surr)	92		74 - 115					11/20/13 19:25	1
Dibromofluoromethane (Surr)	92		75 - 121					11/20/13 19:25	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 14:11	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 20:24	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:24	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:24	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:24	1
Manganese	74		5.0		ug/L		11/14/13 08:53	11/18/13 20:24	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	16		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	0.25		0.20		mg/L			11/15/13 10:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	879				umhos/cm			11/11/13 09:59	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/11/13 09:59	1
Field Temperature by SM2550B	11.0				Celsius			11/11/13 09:59	1
Field pH by SM4500-H B	6.48				SU			11/11/13 09:59	1
Oxidation Reduction Potential by ASTM1498	20				millivolts			11/11/13 09:59	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW4SG:G111113

Lab Sample ID: 240-31386-4

Date Collected: 11/11/13 10:27

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 01:43	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 01:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129					11/21/13 01:43	1
4-Bromofluorobenzene (Surr)	91		66 - 117					11/21/13 01:43	1
Toluene-d8 (Surr)	90		74 - 115					11/21/13 01:43	1
Dibromofluoromethane (Surr)	88		75 - 121					11/21/13 01:43	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 14:37	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	210		50		ug/L		11/14/13 08:53	11/18/13 20:28	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:28	1
Arsenic	24		5.0		ug/L		11/14/13 08:53	11/18/13 20:28	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:28	1
Manganese	220		5.0		ug/L		11/14/13 08:53	11/18/13 20:28	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	0.28		0.20		mg/L			11/15/13 10:42	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	394				umhos/cm			11/11/13 10:27	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/11/13 10:27	1
Field Temperature by SM2550B	11.6				Celsius			11/11/13 10:27	1
Field pH by SM4500-H B	6.14				SU			11/11/13 10:27	1
Oxidation Reduction Potential by ASTM1498	68				millivolts			11/11/13 10:27	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW4SB:G111113

Lab Sample ID: 240-31386-5

Date Collected: 11/11/13 10:55

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 02:05	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 02:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129					11/21/13 02:05	1
4-Bromofluorobenzene (Surr)	93		66 - 117					11/21/13 02:05	1
Toluene-d8 (Surr)	92		74 - 115					11/21/13 02:05	1
Dibromofluoromethane (Surr)	90		75 - 121					11/21/13 02:05	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 15:27	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 20:32	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:32	1
Arsenic	6.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:32	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:32	1
Manganese	41		5.0		ug/L		11/14/13 08:53	11/18/13 20:32	1
Nickel	3.8		2.0		ug/L		11/14/13 08:53	11/18/13 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	69		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	13		2.0		mg/L			11/15/13 10:43	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	5880				umhos/cm			11/11/13 10:55	1
Oxygen, Dissolved by SM4500 O-G	6.17				mg/L			11/11/13 10:55	1
Field Temperature by SM2550B	10.5				Celsius			11/11/13 10:55	1
Field pH by SM4500-H B	12.83				SU			11/11/13 10:55	1
Oxidation Reduction Potential by ASTM1498	-102				millivolts			11/11/13 10:55	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW8SB:G111113

Lab Sample ID: 240-31386-6

Date Collected: 11/11/13 11:28

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 02:27	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 02:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 129		11/21/13 02:27	1
4-Bromofluorobenzene (Surr)	86		66 - 117		11/21/13 02:27	1
Toluene-d8 (Surr)	86		74 - 115		11/21/13 02:27	1
Dibromofluoromethane (Surr)	83		75 - 121		11/21/13 02:27	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 15:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	58		50		ug/L		11/14/13 08:53	11/18/13 20:36	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:36	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:36	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:36	1
Manganese	47		5.0		ug/L		11/14/13 08:53	11/18/13 20:36	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20		0.20		mg/L			11/15/13 10:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	471				umhos/cm			11/11/13 11:28	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/11/13 11:28	1
Field Temperature by SM2550B	10.5				Celsius			11/11/13 11:28	1
Field pH by SM4500-H B	6.36				SU			11/11/13 11:28	1
Oxidation Reduction Potential by ASTM1498	80				millivolts			11/11/13 11:28	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW9SB:G111113

Lab Sample ID: 240-31386-7

Date Collected: 11/11/13 12:03

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 02:50	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 02:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		63 - 129					11/21/13 02:50	1
4-Bromofluorobenzene (Surr)	90		66 - 117					11/21/13 02:50	1
Toluene-d8 (Surr)	89		74 - 115					11/21/13 02:50	1
Dibromofluoromethane (Surr)	90		75 - 121					11/21/13 02:50	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 16:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 20:40	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:40	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:40	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:40	1
Manganese	69		5.0		ug/L		11/14/13 08:53	11/18/13 20:40	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	4.7		0.20		mg/L			11/25/13 11:04	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	828				umhos/cm			11/11/13 12:03	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/11/13 12:03	1
Field Temperature by SM2550B	9.5				Celsius			11/11/13 12:03	1
Field pH by SM4500-H B	7.45				SU			11/11/13 12:03	1
Oxidation Reduction Potential by ASTM1498	-89				millivolts			11/11/13 12:03	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW6SB:G111113

Lab Sample ID: 240-31386-8

Date Collected: 11/11/13 12:38

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 03:12	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 03:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		63 - 129					11/21/13 03:12	1
4-Bromofluorobenzene (Surr)	91		66 - 117					11/21/13 03:12	1
Toluene-d8 (Surr)	92		74 - 115					11/21/13 03:12	1
Dibromofluoromethane (Surr)	89		75 - 121					11/21/13 03:12	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 16:44	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	65		50		ug/L		11/14/13 08:53	11/18/13 20:52	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:52	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:52	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:52	1
Manganese	72		5.0		ug/L		11/14/13 08:53	11/18/13 20:52	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	1.2		0.20		mg/L			11/25/13 11:09	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	913				umhos/cm			11/11/13 12:38	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/11/13 12:38	1
Field Temperature by SM2550B	8.5				Celsius			11/11/13 12:38	1
Field pH by SM4500-H B	7.50				SU			11/11/13 12:38	1
Oxidation Reduction Potential by ASTM1498	-89				millivolts			11/11/13 12:38	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW10SG:G111113

Lab Sample ID: 240-31386-9

Date Collected: 11/11/13 12:53

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 03:35	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 03:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 129					11/21/13 03:35	1
4-Bromofluorobenzene (Surr)	85		66 - 117					11/21/13 03:35	1
Toluene-d8 (Surr)	86		74 - 115					11/21/13 03:35	1
Dibromofluoromethane (Surr)	84		75 - 121					11/21/13 03:35	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 17:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1300		50		ug/L		11/14/13 08:53	11/18/13 20:56	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:56	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 20:56	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 20:56	1
Manganese	150		5.0		ug/L		11/14/13 08:53	11/18/13 20:56	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	79		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	1.9		0.20		mg/L			11/25/13 11:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	790				umhos/cm			11/11/13 12:53	1
Oxygen, Dissolved by SM4500 O-G	na				mg/L			11/11/13 12:53	1
Field Temperature by SM2550B	9.5				Celsius			11/11/13 12:53	1
Field pH by SM4500-H B	6.97				SU			11/11/13 12:53	1
Oxidation Reduction Potential by ASTM1498	na				millivolts			11/11/13 12:53	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW5SG:G111113

Lab Sample ID: 240-31386-10

Date Collected: 11/11/13 13:29

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 03:57	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 03:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 129					11/21/13 03:57	1
4-Bromofluorobenzene (Surr)	91		66 - 117					11/21/13 03:57	1
Toluene-d8 (Surr)	89		74 - 115					11/21/13 03:57	1
Dibromofluoromethane (Surr)	90		75 - 121					11/21/13 03:57	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 17:34	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:00	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:00	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:00	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:00	1
Manganese	380		5.0		ug/L		11/14/13 08:53	11/18/13 21:00	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20	^	0.20		mg/L			11/15/13 15:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	988				umhos/cm			11/11/13 13:29	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/11/13 13:29	1
Field Temperature by SM2550B	10.4				Celsius			11/11/13 13:29	1
Field pH by SM4500-H B	7.55				SU			11/11/13 13:29	1
Oxidation Reduction Potential by ASTM1498	-64				millivolts			11/11/13 13:29	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW5SB:G111113

Lab Sample ID: 240-31386-11

Date Collected: 11/11/13 13:55

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 04:19	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 04:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129					11/21/13 04:19	1
4-Bromofluorobenzene (Surr)	91		66 - 117					11/21/13 04:19	1
Toluene-d8 (Surr)	89		74 - 115					11/21/13 04:19	1
Dibromofluoromethane (Surr)	88		75 - 121					11/21/13 04:19	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 17:59	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:04	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:04	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:04	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:04	1
Manganese	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:04	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20	^	0.20		mg/L			11/15/13 15:38	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	879				umhos/cm			11/11/13 13:55	1
Oxygen, Dissolved by SM4500 O-G	6.41				mg/L			11/11/13 13:55	1
Field Temperature by SM2550B	10.0				Celsius			11/11/13 13:55	1
Field pH by SM4500-H B	9.62				SU			11/11/13 13:55	1
Oxidation Reduction Potential by ASTM1498	12				millivolts			11/11/13 13:55	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:FBI:G111113

Lab Sample ID: 240-31386-12

Date Collected: 11/11/13 14:10

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 04:42	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 04:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 129		11/21/13 04:42	1
4-Bromofluorobenzene (Surr)	90		66 - 117		11/21/13 04:42	1
Toluene-d8 (Surr)	90		74 - 115		11/21/13 04:42	1
Dibromofluoromethane (Surr)	91		75 - 121		11/21/13 04:42	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 18:25	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	94		50		ug/L		11/14/13 08:53	11/18/13 21:07	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:07	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:07	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:07	1
Manganese	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:07	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20 ^		0.20		mg/L			11/15/13 15:43	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SB:G111213

Lab Sample ID: 240-31386-13

Date Collected: 11/12/13 07:19

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 05:04	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 05:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		63 - 129					11/21/13 05:04	1
4-Bromofluorobenzene (Surr)	87		66 - 117					11/21/13 05:04	1
Toluene-d8 (Surr)	87		74 - 115					11/21/13 05:04	1
Dibromofluoromethane (Surr)	86		75 - 121					11/21/13 05:04	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 18:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:11	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:11	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:11	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:11	1
Manganese	24		5.0		ug/L		11/14/13 08:53	11/18/13 21:11	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20	^	0.20		mg/L			11/15/13 15:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	610				umhos/cm			11/12/13 07:19	1
Oxygen, Dissolved by SM4500 O-G	1.18				mg/L			11/12/13 07:19	1
Field Temperature by SM2550B	11.1				Celsius			11/12/13 07:19	1
Field pH by SM4500-H B	7.30				SU			11/12/13 07:19	1
Oxidation Reduction Potential by ASTM1498	116				millivolts			11/12/13 07:19	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:TBI:W111213

Lab Sample ID: 240-31386-14

Date Collected: 11/12/13 00:00

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 05:26	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 05:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		11/21/13 05:26	1
4-Bromofluorobenzene (Surr)	83		66 - 117		11/21/13 05:26	1
Toluene-d8 (Surr)	82		74 - 115		11/21/13 05:26	1
Dibromofluoromethane (Surr)	82		75 - 121		11/21/13 05:26	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 19:15	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SB:G111213A

Lab Sample ID: 240-31386-15

Date Collected: 11/12/13 07:19

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 05:48	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 05:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 129					11/21/13 05:48	1
4-Bromofluorobenzene (Surr)	90		66 - 117					11/21/13 05:48	1
Toluene-d8 (Surr)	91		74 - 115					11/21/13 05:48	1
Dibromofluoromethane (Surr)	90		75 - 121					11/21/13 05:48	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 20:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:15	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:15	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:15	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:15	1
Manganese	18		5.0		ug/L		11/14/13 08:53	11/18/13 21:15	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	<0.20	^	0.20		mg/L			11/15/13 15:57	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	610				umhos/cm			11/12/13 07:19	1
Oxygen, Dissolved by SM4500 O-G	1.18				mg/L			11/12/13 07:19	1
Field Temperature by Sm2550B	11.1				Celsius			11/12/13 07:19	1
Field pH by SM4500-H B	7.30				SU			11/12/13 07:19	1
Oxidation Reduction Potential by ASTM1498	116				millivolts			11/12/13 07:19	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SG:G111213

Lab Sample ID: 240-31386-16

Date Collected: 11/12/13 07:56

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 06:10	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 06:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129					11/21/13 06:10	1
4-Bromofluorobenzene (Surr)	85		66 - 117					11/21/13 06:10	1
Toluene-d8 (Surr)	83		74 - 115					11/21/13 06:10	1
Dibromofluoromethane (Surr)	83		75 - 121					11/21/13 06:10	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 20:31	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:19	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:19	1
Arsenic	5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:19	1
Cobalt	2.6		1.0		ug/L		11/14/13 08:53	11/18/13 21:19	1
Manganese	710		5.0		ug/L		11/14/13 08:53	11/18/13 21:19	1
Nickel	3.4		2.0		ug/L		11/14/13 08:53	11/18/13 21:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	2.1		0.20		mg/L			11/25/13 11:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	658				umhos/cm			11/12/13 07:56	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/12/13 07:56	1
Field Temperature by SM2550B	9.3				Celsius			11/12/13 07:56	1
Field pH by SM4500-H B	6.89				SU			11/12/13 07:56	1
Oxidation Reduction Potential by ASTM1498	-50				millivolts			11/12/13 07:56	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SG:G111213A

Lab Sample ID: 240-31386-17

Date Collected: 11/12/13 07:56

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 06:33	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 06:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 129					11/21/13 06:33	1
4-Bromofluorobenzene (Surr)	89		66 - 117					11/21/13 06:33	1
Toluene-d8 (Surr)	88		74 - 115					11/21/13 06:33	1
Dibromofluoromethane (Surr)	89		75 - 121					11/21/13 06:33	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 20:56	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:23	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:23	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:23	1
Cobalt	2.6		1.0		ug/L		11/14/13 08:53	11/18/13 21:23	1
Manganese	740		5.0		ug/L		11/14/13 08:53	11/18/13 21:23	1
Nickel	3.3		2.0		ug/L		11/14/13 08:53	11/18/13 21:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1
Ammonia (as N)	2.2		0.20		mg/L			11/18/13 16:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	658				umhos/cm			11/12/13 07:56	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/12/13 07:56	1
Field Temperature by SM2550B	9.3				Celsius			11/12/13 07:56	1
Field pH by SM4500-H B	6.89				SU			11/12/13 07:56	1
Oxidation Reduction Potential by ASTM1498	-50				millivolts			11/12/13 07:56	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW17B:G111213

Lab Sample ID: 240-31386-18

Date Collected: 11/12/13 08:31

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 06:55	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 06:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		11/21/13 06:55	1
4-Bromofluorobenzene (Surr)	85		66 - 117		11/21/13 06:55	1
Toluene-d8 (Surr)	84		74 - 115		11/21/13 06:55	1
Dibromofluoromethane (Surr)	84		75 - 121		11/21/13 06:55	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 21:21	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:27	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:27	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:27	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:27	1
Manganese	150		5.0		ug/L		11/14/13 08:53	11/18/13 21:27	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	10		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	0.41		0.20		mg/L			11/18/13 16:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	268				umhos/cm			11/12/13 08:31	1
Oxygen, Dissolved by SM4500 O-G	5.18				mg/L			11/12/13 08:31	1
Field Temperature by SM2550B	7.9				Celsius			11/12/13 08:31	1
Field pH by SM4500-H B	7.90				SU			11/12/13 08:31	1
Oxidation Reduction Potential by ASTM1498	-222				millivolts			11/12/13 08:31	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW15SB:G111213

Lab Sample ID: 240-31386-19

Date Collected: 11/12/13 09:04

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 07:18	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 07:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		63 - 129		11/21/13 07:18	1
4-Bromofluorobenzene (Surr)	93		66 - 117		11/21/13 07:18	1
Toluene-d8 (Surr)	91		74 - 115		11/21/13 07:18	1
Dibromofluoromethane (Surr)	92		75 - 121		11/21/13 07:18	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/15/13 23:27	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:39	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:39	1
Arsenic	74		5.0		ug/L		11/14/13 08:53	11/18/13 21:39	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:39	1
Manganese	160		5.0		ug/L		11/14/13 08:53	11/18/13 21:39	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	3.5		0.20		mg/L			11/18/13 16:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	821				umhos/cm			11/12/13 09:04	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/12/13 09:04	1
Field Temperature by SM2550B	7.4				Celsius			11/12/13 09:04	1
Field pH by SM4500-H B	6.28				SU			11/12/13 09:04	1
Oxidation Reduction Potential by ASTM1498	-99				millivolts			11/12/13 09:04	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW16SB:G111213

Lab Sample ID: 240-31386-20

Date Collected: 11/12/13 09:32

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 07:40	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 07:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129		11/21/13 07:40	1
4-Bromofluorobenzene (Surr)	88		66 - 117		11/21/13 07:40	1
Toluene-d8 (Surr)	87		74 - 115		11/21/13 07:40	1
Dibromofluoromethane (Surr)	89		75 - 121		11/21/13 07:40	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/15/13 23:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 21:43	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:43	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 21:43	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 21:43	1
Manganese	91		5.0		ug/L		11/14/13 08:53	11/18/13 21:43	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 21:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	2.6		0.20		mg/L			11/18/13 16:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	828				umhos/cm			11/12/13 09:32	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/12/13 09:32	1
Field Temperature by SM2550B	8.3				Celsius			11/12/13 09:32	1
Field pH by SM4500-H B	7.33				SU			11/12/13 09:32	1
Oxidation Reduction Potential by ASTM1498	-72				millivolts			11/12/13 09:32	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW16DB:G111213

Lab Sample ID: 240-31386-21

Date Collected: 11/12/13 09:55

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 08:02	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 08:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129					11/21/13 08:02	1
4-Bromofluorobenzene (Surr)	82		66 - 117					11/21/13 08:02	1
Toluene-d8 (Surr)	82		74 - 115					11/21/13 08:02	1
Dibromofluoromethane (Surr)	84		75 - 121					11/21/13 08:02	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/16/13 00:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 09:18	11/18/13 23:45	1
Antimony	<2.0		2.0		ug/L		11/14/13 09:18	11/18/13 23:45	1
Arsenic	<5.0		5.0		ug/L		11/14/13 09:18	11/18/13 23:45	1
Cobalt	<1.0		1.0		ug/L		11/14/13 09:18	11/18/13 23:45	1
Manganese	39		5.0		ug/L		11/14/13 09:18	11/18/13 23:45	1
Nickel	<2.0		2.0		ug/L		11/14/13 09:18	11/18/13 23:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	0.54		0.20		mg/L			11/18/13 16:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	616				umhos/cm			11/12/13 09:55	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/12/13 09:55	1
Field Temperature by SM2550B	7.9				Celsius			11/12/13 09:55	1
Field pH by SM4500-H B	8.63				SU			11/12/13 09:55	1
Oxidation Reduction Potential by ASTM1498	-72				millivolts			11/12/13 09:55	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW9DB:G111213

Lab Sample ID: 240-31386-22

Date Collected: 11/12/13 10:26

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 08:24	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 08:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129					11/21/13 08:24	1
4-Bromofluorobenzene (Surr)	90		66 - 117					11/21/13 08:24	1
Toluene-d8 (Surr)	90		74 - 115					11/21/13 08:24	1
Dibromofluoromethane (Surr)	90		75 - 121					11/21/13 08:24	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/16/13 00:43	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 09:18	11/19/13 00:09	1
Antimony	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:09	1
Arsenic	<5.0		5.0		ug/L		11/14/13 09:18	11/19/13 00:09	1
Cobalt	<1.0		1.0		ug/L		11/14/13 09:18	11/19/13 00:09	1
Manganese	91		5.0		ug/L		11/14/13 09:18	11/19/13 17:13	1
Nickel	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	<0.20		0.20		mg/L			11/18/13 17:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	639				umhos/cm			11/12/13 10:26	1
Oxygen, Dissolved by SM4500 O-G	0				mg/L			11/12/13 10:26	1
Field Temperature by SM2550B	8.3				Celsius			11/12/13 10:26	1
Field pH by SM4500-H B	7.32				SU			11/12/13 10:26	1
Oxidation Reduction Potential by ASTM1498	-51				millivolts			11/12/13 10:26	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:FB2:W111213

Lab Sample ID: 240-31386-23

Date Collected: 11/12/13 11:10

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 13:17	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 129		11/21/13 13:17	1
4-Bromofluorobenzene (Surr)	89		66 - 117		11/21/13 13:17	1
Toluene-d8 (Surr)	88		74 - 115		11/21/13 13:17	1
Dibromofluoromethane (Surr)	89		75 - 121		11/21/13 13:17	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/16/13 01:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 09:18	11/19/13 00:12	1
Antimony	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:12	1
Arsenic	<5.0		5.0		ug/L		11/14/13 09:18	11/19/13 00:12	1
Cobalt	<1.0		1.0		ug/L		11/14/13 09:18	11/19/13 00:12	1
Manganese	<5.0 ^		5.0		ug/L		11/14/13 09:18	11/19/13 00:12	1
Nickel	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	<0.20		0.20		mg/L			11/18/13 17:27	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:RW4:W111213

Lab Sample ID: 240-31386-24

Date Collected: 11/12/13 10:45

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 13:39	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 13:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		63 - 129					11/21/13 13:39	1
4-Bromofluorobenzene (Surr)	93		66 - 117					11/21/13 13:39	1
Toluene-d8 (Surr)	91		74 - 115					11/21/13 13:39	1
Dibromofluoromethane (Surr)	91		75 - 121					11/21/13 13:39	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/16/13 01:34	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 09:18	11/19/13 00:16	1
Antimony	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:16	1
Arsenic	<5.0		5.0		ug/L		11/14/13 09:18	11/19/13 00:16	1
Cobalt	<1.0		1.0		ug/L		11/14/13 09:18	11/19/13 00:16	1
Manganese	67		5.0		ug/L		11/14/13 09:18	11/19/13 17:17	1
Nickel	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	<0.20		0.20		mg/L			11/18/13 17:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	832				umhos/cm			11/12/13 10:45	1
Oxygen, Dissolved by SM4500 O-G	8.62				mg/L			11/12/13 10:45	1
Field Temperature by SM2550B	12.3				Celsius			11/12/13 10:45	1
Field pH by SM4500-H B	6.95				SU			11/12/13 10:45	1
Oxidation Reduction Potential by ASTM1498	-71				millivolts			11/12/13 10:45	1

TestAmerica Canton

Client Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:RW4:W111213A

Lab Sample ID: 240-31386-25

Date Collected: 11/12/13 10:45

Matrix: Water

Date Received: 11/13/13 09:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 14:02	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		11/21/13 14:02	1
4-Bromofluorobenzene (Surr)	85		66 - 117		11/21/13 14:02	1
Toluene-d8 (Surr)	85		74 - 115		11/21/13 14:02	1
Dibromofluoromethane (Surr)	82		75 - 121		11/21/13 14:02	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/16/13 01:59	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 09:18	11/19/13 00:20	1
Antimony	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:20	1
Arsenic	<5.0		5.0		ug/L		11/14/13 09:18	11/19/13 00:20	1
Cobalt	<1.0		1.0		ug/L		11/14/13 09:18	11/19/13 00:20	1
Manganese	77		5.0		ug/L		11/14/13 09:18	11/19/13 17:21	1
Nickel	<2.0		2.0		ug/L		11/14/13 09:18	11/19/13 00:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1
Ammonia (as N)	<0.20		0.20		mg/L			11/18/13 17:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance by SM2510B	832				umhos/cm			11/12/13 10:45	1
Oxygen, Dissolved by SM4500 O-G	8.62				mg/L			11/12/13 10:45	1
Field Temperature by SM2550B	12.3				Celsius			11/12/13 10:45	1
Field pH by SM4500-H B	6.95				SU			11/12/13 10:45	1
Oxidation Reduction Potential by ASTM1498	-71				millivolts			11/12/13 10:45	1

TestAmerica Canton

Surrogate Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (63-129)	BFB (66-117)	TOL (74-115)	DBFM (75-121)
240-31386-1	ALB039:MW2SG:G111113	96	89	90	91
240-31386-2	ALB039:MW2SB:G111113	95	85	88	88
240-31386-3	ALB039:MW3SBA:G111113	99	92	92	92
240-31386-4	ALB039:MW4SG:G111113	94	91	90	88
240-31386-5	ALB039:MW4SB:G111113	96	93	92	90
240-31386-6	ALB039:MW8SB:G111113	90	86	86	83
240-31386-7	ALB039:MW9SB:G111113	92	90	89	90
240-31386-8	ALB039:MW6SB:G111113	97	91	92	89
240-31386-9	ALB039:MW10SG:G111113	89	85	86	84
240-31386-10	ALB039:MW5SG:G111113	95	91	89	90
240-31386-11	ALB039:MW5SB:G111113	96	91	89	88
240-31386-12	ALB039:FBI:G111113	95	90	90	91
240-31386-13	ALB039:MW7SB:G111213	92	87	87	86
240-31386-14	ALB039:TBI:W111213	87	83	82	82
240-31386-15	ALB039:MW7SB:G111213A	95	90	91	90
240-31386-16	ALB039:MW7SG:G111213	86	85	83	83
240-31386-17	ALB039:MW7SG:G111213A	95	89	88	89
240-31386-18	ALB039:MW17B:G111213	87	85	84	84
240-31386-19	ALB039:MW15SB:G111213	98	93	91	92
240-31386-20	ALB039:MW16SB:G111213	94	88	87	89
240-31386-21	ALB039:MW16DB:G111213	87	82	82	84
240-31386-22	ALB039:MW9DB:G111213	94	90	90	90
240-31386-23	ALB039:FB2:W111213	93	89	88	89
240-31386-24	ALB039:RW4:W111213	97	93	91	91
240-31386-24 MS	ALB039:RW4:W111213	95	98	96	94
240-31386-24 MSD	ALB039:RW4:W111213	84	91	86	85
240-31386-25	ALB039:RW4:W111213A	86	85	85	82
LCS 240-110657/4	Lab Control Sample	89	90	90	88
LCS 240-110660/4	Lab Control Sample	92	98	95	90
LCS 240-110890/4	Lab Control Sample	86	90	88	85
MB 240-110657/5	Method Blank	96	92	92	90
MB 240-110660/5	Method Blank	88	87	86	82
MB 240-110890/5	Method Blank	86	86	87	83

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

TestAmerica Canton



QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-110657/5

Matrix: Water

Analysis Batch: 110657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/20/13 11:50	1
Vinyl chloride	<1.0		1.0		ug/L			11/20/13 11:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129		11/20/13 11:50	1
4-Bromofluorobenzene (Surr)	92		66 - 117		11/20/13 11:50	1
Toluene-d8 (Surr)	92		74 - 115		11/20/13 11:50	1
Dibromofluoromethane (Surr)	90		75 - 121		11/20/13 11:50	1

Lab Sample ID: LCS 240-110657/4

Matrix: Water

Analysis Batch: 110657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.74		ug/L		97	83 - 112
Vinyl chloride	10.0	9.06		ug/L		91	53 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		63 - 129
4-Bromofluorobenzene (Surr)	90		66 - 117
Toluene-d8 (Surr)	90		74 - 115
Dibromofluoromethane (Surr)	88		75 - 121

Lab Sample ID: MB 240-110660/5

Matrix: Water

Analysis Batch: 110660

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/21/13 01:20	1
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 01:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		63 - 129		11/21/13 01:20	1
4-Bromofluorobenzene (Surr)	87		66 - 117		11/21/13 01:20	1
Toluene-d8 (Surr)	86		74 - 115		11/21/13 01:20	1
Dibromofluoromethane (Surr)	82		75 - 121		11/21/13 01:20	1

Lab Sample ID: LCS 240-110660/4

Matrix: Water

Analysis Batch: 110660

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.92		ug/L		99	83 - 112
Vinyl chloride	10.0	10.1		ug/L		101	53 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		63 - 129

TestAmerica Canton

QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-110660/4

Matrix: Water

Analysis Batch: 110660

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		66 - 117
Toluene-d8 (Surr)	95		74 - 115
Dibromofluoromethane (Surr)	90		75 - 121

Lab Sample ID: MB 240-110890/5

Matrix: Water

Analysis Batch: 110890

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<1.0		1.0		ug/L			11/21/13 12:54	1	
Vinyl chloride	<1.0		1.0		ug/L			11/21/13 12:54	1	

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil	Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129					11/21/13 12:54	1	
4-Bromofluorobenzene (Surr)	86		66 - 117					11/21/13 12:54	1	
Toluene-d8 (Surr)	87		74 - 115					11/21/13 12:54	1	
Dibromofluoromethane (Surr)	83		75 - 121					11/21/13 12:54	1	

Lab Sample ID: LCS 240-110890/4

Matrix: Water

Analysis Batch: 110890

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

		Spike	LCS	LCS				%Rec.		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene		10.0	9.75		ug/L		97	83 - 112		
Vinyl chloride		10.0	9.77		ug/L		98	53 - 127		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		63 - 129
4-Bromofluorobenzene (Surr)	90		66 - 117
Toluene-d8 (Surr)	88		74 - 115
Dibromofluoromethane (Surr)	85		75 - 121

Lab Sample ID: 240-31386-24 MS

Matrix: Water

Analysis Batch: 110890

Client Sample ID: ALB039:RW4:W111213

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS			%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<1.0		10.0	11.0		ug/L		110	72 - 121	
Vinyl chloride	<1.0		10.0	11.1		ug/L		107	49 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 129
4-Bromofluorobenzene (Surr)	98		66 - 117
Toluene-d8 (Surr)	96		74 - 115
Dibromofluoromethane (Surr)	94		75 - 121

TestAmerica Canton

QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-31386-24 MSD

Matrix: Water

Analysis Batch: 110890

Client Sample ID: ALB039:RW4:W111213

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0		10.0	9.43		ug/L		94	72 - 121	16	30
Vinyl chloride	<1.0		10.0	10.0		ug/L		96	49 - 130	10	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	84		63 - 129								
4-Bromofluorobenzene (Surr)	91		66 - 117								
Toluene-d8 (Surr)	86		74 - 115								
Dibromofluoromethane (Surr)	85		75 - 121								

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 480-152339/1-A

Matrix: Water

Analysis Batch: 152324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 152339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:44	11/15/13 11:10	1

Lab Sample ID: LCS 480-152339/2-A

Matrix: Water

Analysis Batch: 152324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 152339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits			
1,2-Dibromoethane	0.229	0.233		ug/L		102	46 - 146			
1,2-Dibromo-3-Chloropropane	0.229	0.256		ug/L		112	51 - 156			

Lab Sample ID: LCSD 480-152339/3-A

Matrix: Water

Analysis Batch: 152324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 152339

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane	0.229	0.230		ug/L		101	46 - 146	1	40
1,2-Dibromo-3-Chloropropane	0.229	0.257		ug/L		113	51 - 156	1	40

Lab Sample ID: MB 480-152340/1-A

Matrix: Water

Analysis Batch: 152324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 152340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.011		0.011		ug/L		11/15/13 10:45	11/15/13 22:12	1

Lab Sample ID: LCS 480-152340/2-A

Matrix: Water

Analysis Batch: 152324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 152340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits			
1,2-Dibromoethane	0.229	0.238		ug/L		104	46 - 146			
1,2-Dibromo-3-Chloropropane	0.229	0.265		ug/L		116	51 - 156			

TestAmerica Canton

QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 480-152340/3-A
Matrix: Water
Analysis Batch: 152324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 152340

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits			
1,2-Dibromoethane	0.229	0.235		ug/L		103	46 - 146		1	40
1,2-Dibromo-3-Chloropropane	0.229	0.263		ug/L		115	51 - 156		1	40

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-109802/1-A
Matrix: Water
Analysis Batch: 110475

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 109802

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	<50		50		ug/L		11/14/13 08:53	11/18/13 19:48	1
Antimony	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 19:48	1
Arsenic	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 19:48	1
Cobalt	<1.0		1.0		ug/L		11/14/13 08:53	11/18/13 19:48	1
Manganese	<5.0		5.0		ug/L		11/14/13 08:53	11/18/13 19:48	1
Nickel	<2.0		2.0		ug/L		11/14/13 08:53	11/18/13 19:48	1

Lab Sample ID: LCS 240-109802/2-A
Matrix: Water
Analysis Batch: 110475

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 109802

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Aluminum	10000	9390		ug/L		94	80 - 120	
Antimony	100	99.3		ug/L		99	80 - 120	
Arsenic	1000	957		ug/L		96	80 - 120	
Cobalt	1000	1030		ug/L		103	80 - 120	
Manganese	1000	1030		ug/L		103	80 - 120	
Nickel	1000	1040		ug/L		104	80 - 120	

Lab Sample ID: 240-31386-1 MS
Matrix: Water
Analysis Batch: 110475

Client Sample ID: ALB039:MW2SG:G111113
Prep Type: Total Recoverable
Prep Batch: 109802

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	
Aluminum	<50		10000	9930		ug/L		99	63 - 128	
Antimony	<2.0		100	106		ug/L		106	44 - 153	
Arsenic	<5.0		1000	1020		ug/L		102	82 - 123	
Cobalt	<1.0		1000	1070		ug/L		107	67 - 114	
Manganese	<5.0		1000	1090		ug/L		108	10 - 172	
Nickel	<2.0		1000	1060		ug/L		106	72 - 111	

Lab Sample ID: 240-31386-1 MSD
Matrix: Water
Analysis Batch: 110475

Client Sample ID: ALB039:MW2SG:G111113
Prep Type: Total Recoverable
Prep Batch: 109802

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits			
Aluminum	<50		10000	9820		ug/L		98	63 - 128		1	20
Antimony	<2.0		100	106		ug/L		106	44 - 153		0	20
Arsenic	<5.0		1000	1010		ug/L		101	82 - 123		2	20

TestAmerica Canton

QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-31386-1 MSD

Matrix: Water

Analysis Batch: 110475

Client Sample ID: ALB039:MW2SG:G111113

Prep Type: Total Recoverable

Prep Batch: 109802

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Cobalt	<1.0		1000	1070		ug/L		107	67 - 114	0	20
Manganese	<5.0		1000	1080		ug/L		108	10 - 172	0	20
Nickel	<2.0		1000	1060		ug/L		106	72 - 111	0	20

Lab Sample ID: MB 240-109818/1-A

Matrix: Water

Analysis Batch: 110475

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 109818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<50		50		ug/L		11/14/13 09:18	11/18/13 23:37	1
Antimony	<2.0		2.0		ug/L		11/14/13 09:18	11/18/13 23:37	1
Arsenic	<5.0		5.0		ug/L		11/14/13 09:18	11/18/13 23:37	1
Cobalt	<1.0		1.0		ug/L		11/14/13 09:18	11/18/13 23:37	1
Manganese	<5.0		5.0		ug/L		11/14/13 09:18	11/18/13 23:37	1
Nickel	<2.0		2.0		ug/L		11/14/13 09:18	11/18/13 23:37	1

Lab Sample ID: LCS 240-109818/2-A

Matrix: Water

Analysis Batch: 110475

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 109818

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9160		ug/L		92	80 - 120
Antimony	100	105		ug/L		105	80 - 120
Arsenic	1000	950		ug/L		95	80 - 120
Cobalt	1000	1100		ug/L		110	80 - 120
Manganese	1000	1090		ug/L		109	80 - 120
Nickel	1000	1100		ug/L		110	80 - 120

Lab Sample ID: 240-31386-21 MS

Matrix: Water

Analysis Batch: 110475

Client Sample ID: ALB039:MW16DB:G111213

Prep Type: Total Recoverable

Prep Batch: 109818

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	<50		10000	9290		ug/L		93	63 - 128
Antimony	<2.0		100	106		ug/L		105	44 - 153
Arsenic	<5.0		1000	956		ug/L		95	82 - 123
Cobalt	<1.0		1000	1070		ug/L		107	67 - 114
Nickel	<2.0		1000	1060		ug/L		106	72 - 111

Lab Sample ID: 240-31386-21 MS

Matrix: Water

Analysis Batch: 110607

Client Sample ID: ALB039:MW16DB:G111213

Prep Type: Total Recoverable

Prep Batch: 109818

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	39		1000	1120		ug/L		108	10 - 172

TestAmerica Canton

QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-31386-21 MSD

Matrix: Water

Analysis Batch: 110475

Client Sample ID: ALB039:MW16DB:G111213

Prep Type: Total Recoverable

Prep Batch: 109818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	<50		10000	9330		ug/L		93	63 - 128	0	20
Antimony	<2.0		100	106		ug/L		105	44 - 153	1	20
Arsenic	<5.0		1000	943		ug/L		94	82 - 123	1	20
Cobalt	<1.0		1000	1090		ug/L		109	67 - 114	1	20
Nickel	<2.0		1000	1080		ug/L		108	72 - 111	1	20

Lab Sample ID: 240-31386-21 MSD

Matrix: Water

Analysis Batch: 110607

Client Sample ID: ALB039:MW16DB:G111213

Prep Type: Total Recoverable

Prep Batch: 109818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	39		1000	1120		ug/L		108	10 - 172	1	20

Method: 160.2 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-109804/1

Matrix: Water

Analysis Batch: 109804

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/14/13 09:01	1

Lab Sample ID: LCS 240-109804/2

Matrix: Water

Analysis Batch: 109804

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	29.0	25.0		mg/L		86	73 - 113

Lab Sample ID: 240-31386-8 DU

Matrix: Water

Analysis Batch: 109804

Client Sample ID: ALB039:MW6SB:G111113

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	<4.0		<4.0		mg/L		NC	10

Lab Sample ID: MB 240-110049/1

Matrix: Water

Analysis Batch: 110049

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0		mg/L			11/15/13 11:19	1

Lab Sample ID: LCS 240-110049/2

Matrix: Water

Analysis Batch: 110049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	58.0	44.0		mg/L		76	73 - 113

TestAmerica Canton

QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 160.2 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 240-31386-24 DU

Matrix: Water

Analysis Batch: 110049

Client Sample ID: ALB039:RW4:W111213

Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	
	Result	Qualifier	Result	Qualifier			RPD	Limit
Total Suspended Solids	<4.0		<4.0		mg/L		NC	10

Method: 350.3 - Nitrogen, Ammonia

Lab Sample ID: MB 240-110118/7

Matrix: Water

Analysis Batch: 110118

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia (as N)	<0.20		0.20		mg/L			11/15/13 10:41	1

Lab Sample ID: LCS 240-110118/8

Matrix: Water

Analysis Batch: 110118

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	10.1	10.5		mg/L		104	85 - 114

Lab Sample ID: 240-31386-6 MS

Matrix: Water

Analysis Batch: 110118

Client Sample ID: ALB039:MW8SB:G111113

Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Ammonia (as N)	<0.20		2.50	2.48		mg/L		95	75 - 125

Lab Sample ID: 240-31386-6 MSD

Matrix: Water

Analysis Batch: 110118

Client Sample ID: ALB039:MW8SB:G111113

Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Ammonia (as N)	<0.20		2.50	2.53		mg/L		97	75 - 125	2	20

Lab Sample ID: MB 240-110414/7

Matrix: Water

Analysis Batch: 110414

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia (as N)	<0.20		0.20		mg/L			11/18/13 16:06	1

Lab Sample ID: LCS 240-110414/8

Matrix: Water

Analysis Batch: 110414

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	10.1	10.2		mg/L		101	85 - 114

TestAmerica Canton

QC Sample Results

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Method: 350.3 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 240-111362/7

Matrix: Water

Analysis Batch: 111362

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	<0.20		0.20		mg/L			11/25/13 10:52	1

Lab Sample ID: LCS 240-111362/8

Matrix: Water

Analysis Batch: 111362

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	10.1	9.41		mg/L		93	85 - 114

TestAmerica Canton

QC Association Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

GC/MS VOA

Analysis Batch: 110657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total/NA	Water	8260B	
240-31386-2	ALB039:MW2SB:G111113	Total/NA	Water	8260B	
240-31386-3	ALB039:MW3SBA:G111113	Total/NA	Water	8260B	
LCS 240-110657/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-110657/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 110660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-4	ALB039:MW4SG:G111113	Total/NA	Water	8260B	
240-31386-5	ALB039:MW4SB:G111113	Total/NA	Water	8260B	
240-31386-6	ALB039:MW8SB:G111113	Total/NA	Water	8260B	
240-31386-7	ALB039:MW9SB:G111113	Total/NA	Water	8260B	
240-31386-8	ALB039:MW6SB:G111113	Total/NA	Water	8260B	
240-31386-9	ALB039:MW10SG:G111113	Total/NA	Water	8260B	
240-31386-10	ALB039:MW5SG:G111113	Total/NA	Water	8260B	
240-31386-11	ALB039:MW5SB:G111113	Total/NA	Water	8260B	
240-31386-12	ALB039:FBI:G111113	Total/NA	Water	8260B	
240-31386-13	ALB039:MW7SB:G111213	Total/NA	Water	8260B	
240-31386-14	ALB039:TBI:W111213	Total/NA	Water	8260B	
240-31386-15	ALB039:MW7SB:G111213A	Total/NA	Water	8260B	
240-31386-16	ALB039:MW7SG:G111213	Total/NA	Water	8260B	
240-31386-17	ALB039:MW7SG:G111213A	Total/NA	Water	8260B	
240-31386-18	ALB039:MW17B:G111213	Total/NA	Water	8260B	
240-31386-19	ALB039:MW15SB:G111213	Total/NA	Water	8260B	
240-31386-20	ALB039:MW16SB:G111213	Total/NA	Water	8260B	
240-31386-21	ALB039:MW16DB:G111213	Total/NA	Water	8260B	
240-31386-22	ALB039:MW9DB:G111213	Total/NA	Water	8260B	
LCS 240-110660/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-110660/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 110890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-23	ALB039:FB2:W111213	Total/NA	Water	8260B	
240-31386-24	ALB039:RW4:W111213	Total/NA	Water	8260B	
240-31386-24 MS	ALB039:RW4:W111213	Total/NA	Water	8260B	
240-31386-24 MSD	ALB039:RW4:W111213	Total/NA	Water	8260B	
240-31386-25	ALB039:RW4:W111213A	Total/NA	Water	8260B	
LCS 240-110890/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-110890/5	Method Blank	Total/NA	Water	8260B	

GC Semi VOA

Analysis Batch: 152324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total/NA	Water	8011	152339
240-31386-2	ALB039:MW2SB:G111113	Total/NA	Water	8011	152339
240-31386-3	ALB039:MW3SBA:G111113	Total/NA	Water	8011	152339
240-31386-4	ALB039:MW4SG:G111113	Total/NA	Water	8011	152339
240-31386-5	ALB039:MW4SB:G111113	Total/NA	Water	8011	152339
240-31386-6	ALB039:MW8SB:G111113	Total/NA	Water	8011	152339

TestAmerica Canton

QC Association Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

GC Semi VOA (Continued)

Analysis Batch: 152324 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-7	ALB039:MW9SB:G111113	Total/NA	Water	8011	152339
240-31386-8	ALB039:MW6SB:G111113	Total/NA	Water	8011	152339
240-31386-9	ALB039:MW10SG:G111113	Total/NA	Water	8011	152339
240-31386-10	ALB039:MW5SG:G111113	Total/NA	Water	8011	152339
240-31386-11	ALB039:MW5SB:G111113	Total/NA	Water	8011	152339
240-31386-12	ALB039:FBI:G111113	Total/NA	Water	8011	152339
240-31386-13	ALB039:MW7SB:G111213	Total/NA	Water	8011	152339
240-31386-14	ALB039:TBI:W111213	Total/NA	Water	8011	152339
240-31386-15	ALB039:MW7SB:G111213A	Total/NA	Water	8011	152339
240-31386-16	ALB039:MW7SG:G111213	Total/NA	Water	8011	152339
240-31386-17	ALB039:MW7SG:G111213A	Total/NA	Water	8011	152339
240-31386-18	ALB039:MW17B:G111213	Total/NA	Water	8011	152339
240-31386-19	ALB039:MW15SB:G111213	Total/NA	Water	8011	152340
240-31386-20	ALB039:MW16SB:G111213	Total/NA	Water	8011	152340
240-31386-21	ALB039:MW16DB:G111213	Total/NA	Water	8011	152340
240-31386-22	ALB039:MW9DB:G111213	Total/NA	Water	8011	152340
240-31386-23	ALB039:FB2:W111213	Total/NA	Water	8011	152340
240-31386-24	ALB039:RW4:W111213	Total/NA	Water	8011	152340
240-31386-25	ALB039:RW4:W111213A	Total/NA	Water	8011	152340
LCS 480-152339/2-A	Lab Control Sample	Total/NA	Water	8011	152339
LCS 480-152340/2-A	Lab Control Sample	Total/NA	Water	8011	152340
LCSD 480-152339/3-A	Lab Control Sample Dup	Total/NA	Water	8011	152339
LCSD 480-152340/3-A	Lab Control Sample Dup	Total/NA	Water	8011	152340
MB 480-152339/1-A	Method Blank	Total/NA	Water	8011	152339
MB 480-152340/1-A	Method Blank	Total/NA	Water	8011	152340

Prep Batch: 152339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total/NA	Water	8011	
240-31386-2	ALB039:MW2SB:G111113	Total/NA	Water	8011	
240-31386-3	ALB039:MW3SBA:G111113	Total/NA	Water	8011	
240-31386-4	ALB039:MW4SG:G111113	Total/NA	Water	8011	
240-31386-5	ALB039:MW4SB:G111113	Total/NA	Water	8011	
240-31386-6	ALB039:MW8SB:G111113	Total/NA	Water	8011	
240-31386-7	ALB039:MW9SB:G111113	Total/NA	Water	8011	
240-31386-8	ALB039:MW6SB:G111113	Total/NA	Water	8011	
240-31386-9	ALB039:MW10SG:G111113	Total/NA	Water	8011	
240-31386-10	ALB039:MW5SG:G111113	Total/NA	Water	8011	
240-31386-11	ALB039:MW5SB:G111113	Total/NA	Water	8011	
240-31386-12	ALB039:FBI:G111113	Total/NA	Water	8011	
240-31386-13	ALB039:MW7SB:G111213	Total/NA	Water	8011	
240-31386-14	ALB039:TBI:W111213	Total/NA	Water	8011	
240-31386-15	ALB039:MW7SB:G111213A	Total/NA	Water	8011	
240-31386-16	ALB039:MW7SG:G111213	Total/NA	Water	8011	
240-31386-17	ALB039:MW7SG:G111213A	Total/NA	Water	8011	
240-31386-18	ALB039:MW17B:G111213	Total/NA	Water	8011	
LCS 480-152339/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 480-152339/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
MB 480-152339/1-A	Method Blank	Total/NA	Water	8011	

TestAmerica Canton

QC Association Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

GC Semi VOA (Continued)

Prep Batch: 152340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-19	ALB039:MW15SB:G111213	Total/NA	Water	8011	
240-31386-20	ALB039:MW16SB:G111213	Total/NA	Water	8011	
240-31386-21	ALB039:MW16DB:G111213	Total/NA	Water	8011	
240-31386-22	ALB039:MW9DB:G111213	Total/NA	Water	8011	
240-31386-23	ALB039:FB2:W111213	Total/NA	Water	8011	
240-31386-24	ALB039:RW4:W111213	Total/NA	Water	8011	
240-31386-25	ALB039:RW4:W111213A	Total/NA	Water	8011	
LCS 480-152340/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 480-152340/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
MB 480-152340/1-A	Method Blank	Total/NA	Water	8011	

Metals

Prep Batch: 109802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total Recoverable	Water	3005A	
240-31386-1 MS	ALB039:MW2SG:G111113	Total Recoverable	Water	3005A	
240-31386-1 MSD	ALB039:MW2SG:G111113	Total Recoverable	Water	3005A	
240-31386-2	ALB039:MW2SB:G111113	Total Recoverable	Water	3005A	
240-31386-3	ALB039:MW3SBA:G111113	Total Recoverable	Water	3005A	
240-31386-4	ALB039:MW4SG:G111113	Total Recoverable	Water	3005A	
240-31386-5	ALB039:MW4SB:G111113	Total Recoverable	Water	3005A	
240-31386-6	ALB039:MW8SB:G111113	Total Recoverable	Water	3005A	
240-31386-7	ALB039:MW9SB:G111113	Total Recoverable	Water	3005A	
240-31386-8	ALB039:MW6SB:G111113	Total Recoverable	Water	3005A	
240-31386-9	ALB039:MW10SG:G111113	Total Recoverable	Water	3005A	
240-31386-10	ALB039:MW5SG:G111113	Total Recoverable	Water	3005A	
240-31386-11	ALB039:MW5SB:G111113	Total Recoverable	Water	3005A	
240-31386-12	ALB039:FB1:G111113	Total Recoverable	Water	3005A	
240-31386-13	ALB039:MW7SB:G111213	Total Recoverable	Water	3005A	
240-31386-15	ALB039:MW7SB:G111213A	Total Recoverable	Water	3005A	
240-31386-16	ALB039:MW7SG:G111213	Total Recoverable	Water	3005A	
240-31386-17	ALB039:MW7SG:G111213A	Total Recoverable	Water	3005A	
240-31386-18	ALB039:MW17B:G111213	Total Recoverable	Water	3005A	
240-31386-19	ALB039:MW15SB:G111213	Total Recoverable	Water	3005A	
240-31386-20	ALB039:MW16SB:G111213	Total Recoverable	Water	3005A	
LCS 240-109802/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-109802/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 109818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-21	ALB039:MW16DB:G111213	Total Recoverable	Water	3005A	
240-31386-21 MS	ALB039:MW16DB:G111213	Total Recoverable	Water	3005A	
240-31386-21 MSD	ALB039:MW16DB:G111213	Total Recoverable	Water	3005A	
240-31386-22	ALB039:MW9DB:G111213	Total Recoverable	Water	3005A	
240-31386-23	ALB039:FB2:W111213	Total Recoverable	Water	3005A	
240-31386-24	ALB039:RW4:W111213	Total Recoverable	Water	3005A	
240-31386-25	ALB039:RW4:W111213A	Total Recoverable	Water	3005A	
LCS 240-109818/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-109818/1-A	Method Blank	Total Recoverable	Water	3005A	

TestAmerica Canton

QC Association Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Metals (Continued)

Analysis Batch: 110475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total Recoverable	Water	6020	109802
240-31386-1 MS	ALB039:MW2SG:G111113	Total Recoverable	Water	6020	109802
240-31386-1 MSD	ALB039:MW2SG:G111113	Total Recoverable	Water	6020	109802
240-31386-2	ALB039:MW2SB:G111113	Total Recoverable	Water	6020	109802
240-31386-3	ALB039:MW3SBA:G111113	Total Recoverable	Water	6020	109802
240-31386-4	ALB039:MW4SG:G111113	Total Recoverable	Water	6020	109802
240-31386-5	ALB039:MW4SB:G111113	Total Recoverable	Water	6020	109802
240-31386-6	ALB039:MW8SB:G111113	Total Recoverable	Water	6020	109802
240-31386-7	ALB039:MW9SB:G111113	Total Recoverable	Water	6020	109802
240-31386-8	ALB039:MW6SB:G111113	Total Recoverable	Water	6020	109802
240-31386-9	ALB039:MW10SG:G111113	Total Recoverable	Water	6020	109802
240-31386-10	ALB039:MW5SG:G111113	Total Recoverable	Water	6020	109802
240-31386-11	ALB039:MW5SB:G111113	Total Recoverable	Water	6020	109802
240-31386-12	ALB039:FBI:G111113	Total Recoverable	Water	6020	109802
240-31386-13	ALB039:MW7SB:G111213	Total Recoverable	Water	6020	109802
240-31386-15	ALB039:MW7SB:G111213A	Total Recoverable	Water	6020	109802
240-31386-16	ALB039:MW7SG:G111213	Total Recoverable	Water	6020	109802
240-31386-17	ALB039:MW7SG:G111213A	Total Recoverable	Water	6020	109802
240-31386-18	ALB039:MW17B:G111213	Total Recoverable	Water	6020	109802
240-31386-19	ALB039:MW15SB:G111213	Total Recoverable	Water	6020	109802
240-31386-20	ALB039:MW16SB:G111213	Total Recoverable	Water	6020	109802
240-31386-21	ALB039:MW16DB:G111213	Total Recoverable	Water	6020	109818
240-31386-21 MS	ALB039:MW16DB:G111213	Total Recoverable	Water	6020	109818
240-31386-21 MSD	ALB039:MW16DB:G111213	Total Recoverable	Water	6020	109818
240-31386-22	ALB039:MW9DB:G111213	Total Recoverable	Water	6020	109818
240-31386-23	ALB039:FB2:W111213	Total Recoverable	Water	6020	109818
240-31386-24	ALB039:RW4:W111213	Total Recoverable	Water	6020	109818
240-31386-25	ALB039:RW4:W111213A	Total Recoverable	Water	6020	109818
LCS 240-109802/2-A	Lab Control Sample	Total Recoverable	Water	6020	109802
LCS 240-109818/2-A	Lab Control Sample	Total Recoverable	Water	6020	109818
MB 240-109802/1-A	Method Blank	Total Recoverable	Water	6020	109802
MB 240-109818/1-A	Method Blank	Total Recoverable	Water	6020	109818

Analysis Batch: 110607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-21 MS	ALB039:MW16DB:G111213	Total Recoverable	Water	6020	109818
240-31386-21 MSD	ALB039:MW16DB:G111213	Total Recoverable	Water	6020	109818
240-31386-22	ALB039:MW9DB:G111213	Total Recoverable	Water	6020	109818
240-31386-24	ALB039:RW4:W111213	Total Recoverable	Water	6020	109818
240-31386-25	ALB039:RW4:W111213A	Total Recoverable	Water	6020	109818

General Chemistry

Analysis Batch: 109804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total/NA	Water	160.2	
240-31386-2	ALB039:MW2SB:G111113	Total/NA	Water	160.2	
240-31386-3	ALB039:MW3SBA:G111113	Total/NA	Water	160.2	
240-31386-4	ALB039:MW4SG:G111113	Total/NA	Water	160.2	
240-31386-5	ALB039:MW4SB:G111113	Total/NA	Water	160.2	

TestAmerica Canton

QC Association Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

General Chemistry (Continued)

Analysis Batch: 109804 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-6	ALB039:MW8SB:G111113	Total/NA	Water	160.2	
240-31386-7	ALB039:MW9SB:G111113	Total/NA	Water	160.2	
240-31386-8	ALB039:MW6SB:G111113	Total/NA	Water	160.2	
240-31386-8 DU	ALB039:MW6SB:G111113	Total/NA	Water	160.2	
240-31386-9	ALB039:MW10SG:G111113	Total/NA	Water	160.2	
240-31386-10	ALB039:MW5SG:G111113	Total/NA	Water	160.2	
240-31386-11	ALB039:MW5SB:G111113	Total/NA	Water	160.2	
240-31386-12	ALB039:FBI:G111113	Total/NA	Water	160.2	
240-31386-13	ALB039:MW7SB:G111213	Total/NA	Water	160.2	
240-31386-15	ALB039:MW7SB:G111213A	Total/NA	Water	160.2	
240-31386-16	ALB039:MW7SG:G111213	Total/NA	Water	160.2	
240-31386-17	ALB039:MW7SG:G111213A	Total/NA	Water	160.2	
LCS 240-109804/2	Lab Control Sample	Total/NA	Water	160.2	
MB 240-109804/1	Method Blank	Total/NA	Water	160.2	

Analysis Batch: 110049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-18	ALB039:MW17B:G111213	Total/NA	Water	160.2	
240-31386-19	ALB039:MW15SB:G111213	Total/NA	Water	160.2	
240-31386-20	ALB039:MW16SB:G111213	Total/NA	Water	160.2	
240-31386-21	ALB039:MW16DB:G111213	Total/NA	Water	160.2	
240-31386-22	ALB039:MW9DB:G111213	Total/NA	Water	160.2	
240-31386-23	ALB039:FB2:W111213	Total/NA	Water	160.2	
240-31386-24	ALB039:RW4:W111213	Total/NA	Water	160.2	
240-31386-24 DU	ALB039:RW4:W111213	Total/NA	Water	160.2	
240-31386-25	ALB039:RW4:W111213A	Total/NA	Water	160.2	
LCS 240-110049/2	Lab Control Sample	Total/NA	Water	160.2	
MB 240-110049/1	Method Blank	Total/NA	Water	160.2	

Analysis Batch: 110118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total/NA	Water	350.3	
240-31386-2	ALB039:MW2SB:G111113	Total/NA	Water	350.3	
240-31386-3	ALB039:MW3SBA:G111113	Total/NA	Water	350.3	
240-31386-4	ALB039:MW4SG:G111113	Total/NA	Water	350.3	
240-31386-5	ALB039:MW4SB:G111113	Total/NA	Water	350.3	
240-31386-6	ALB039:MW8SB:G111113	Total/NA	Water	350.3	
240-31386-6 MS	ALB039:MW8SB:G111113	Total/NA	Water	350.3	
240-31386-6 MSD	ALB039:MW8SB:G111113	Total/NA	Water	350.3	
240-31386-10	ALB039:MW5SG:G111113	Total/NA	Water	350.3	
240-31386-11	ALB039:MW5SB:G111113	Total/NA	Water	350.3	
240-31386-12	ALB039:FBI:G111113	Total/NA	Water	350.3	
240-31386-13	ALB039:MW7SB:G111213	Total/NA	Water	350.3	
240-31386-15	ALB039:MW7SB:G111213A	Total/NA	Water	350.3	
LCS 240-110118/8	Lab Control Sample	Total/NA	Water	350.3	
MB 240-110118/7	Method Blank	Total/NA	Water	350.3	

Analysis Batch: 110414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-17	ALB039:MW7SG:G111213A	Total/NA	Water	350.3	
240-31386-18	ALB039:MW17B:G111213	Total/NA	Water	350.3	

TestAmerica Canton



QC Association Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

General Chemistry (Continued)

Analysis Batch: 110414 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-19	ALB039:MW15SB:G111213	Total/NA	Water	350.3	
240-31386-20	ALB039:MW16SB:G111213	Total/NA	Water	350.3	
240-31386-21	ALB039:MW16DB:G111213	Total/NA	Water	350.3	
240-31386-22	ALB039:MW9DB:G111213	Total/NA	Water	350.3	
240-31386-23	ALB039:FB2:W111213	Total/NA	Water	350.3	
240-31386-24	ALB039:RW4:W111213	Total/NA	Water	350.3	
240-31386-25	ALB039:RW4:W111213A	Total/NA	Water	350.3	
LCS 240-110414/8	Lab Control Sample	Total/NA	Water	350.3	
MB 240-110414/7	Method Blank	Total/NA	Water	350.3	

Analysis Batch: 111362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-7	ALB039:MW9SB:G111113	Total/NA	Water	350.3	
240-31386-8	ALB039:MW6SB:G111113	Total/NA	Water	350.3	
240-31386-9	ALB039:MW10SG:G111113	Total/NA	Water	350.3	
240-31386-16	ALB039:MW7SG:G111213	Total/NA	Water	350.3	
LCS 240-111362/8	Lab Control Sample	Total/NA	Water	350.3	
MB 240-111362/7	Method Blank	Total/NA	Water	350.3	

Field Service / Mobile Lab

Analysis Batch: 110052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-1	ALB039:MW2SG:G111113	Total/NA	Water	Field Sampling	
240-31386-2	ALB039:MW2SB:G111113	Total/NA	Water	Field Sampling	
240-31386-3	ALB039:MW3SBA:G111113	Total/NA	Water	Field Sampling	
240-31386-4	ALB039:MW4SG:G111113	Total/NA	Water	Field Sampling	
240-31386-5	ALB039:MW4SB:G111113	Total/NA	Water	Field Sampling	
240-31386-6	ALB039:MW8SB:G111113	Total/NA	Water	Field Sampling	
240-31386-7	ALB039:MW9SB:G111113	Total/NA	Water	Field Sampling	
240-31386-8	ALB039:MW6SB:G111113	Total/NA	Water	Field Sampling	
240-31386-9	ALB039:MW10SG:G111113	Total/NA	Water	Field Sampling	
240-31386-10	ALB039:MW5SG:G111113	Total/NA	Water	Field Sampling	
240-31386-11	ALB039:MW5SB:G111113	Total/NA	Water	Field Sampling	

Analysis Batch: 110056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31386-13	ALB039:MW7SB:G111213	Total/NA	Water	Field Sampling	
240-31386-15	ALB039:MW7SB:G111213A	Total/NA	Water	Field Sampling	
240-31386-16	ALB039:MW7SG:G111213	Total/NA	Water	Field Sampling	
240-31386-17	ALB039:MW7SG:G111213A	Total/NA	Water	Field Sampling	
240-31386-18	ALB039:MW17B:G111213	Total/NA	Water	Field Sampling	
240-31386-19	ALB039:MW15SB:G111213	Total/NA	Water	Field Sampling	
240-31386-20	ALB039:MW16SB:G111213	Total/NA	Water	Field Sampling	
240-31386-21	ALB039:MW16DB:G111213	Total/NA	Water	Field Sampling	
240-31386-22	ALB039:MW9DB:G111213	Total/NA	Water	Field Sampling	
240-31386-24	ALB039:RW4:W111213	Total/NA	Water	Field Sampling	
240-31386-25	ALB039:RW4:W111213A	Total/NA	Water	Field Sampling	

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW2SG:G111113

Lab Sample ID: 240-31386-1

Date Collected: 11/11/13 09:03

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110657	11/20/13 18:40	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 13:20	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:04	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 10:41	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 09:03		TAL CAN

Client Sample ID: ALB039:MW2SB:G111113

Lab Sample ID: 240-31386-2

Date Collected: 11/11/13 09:28

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110657	11/20/13 19:02	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 13:46	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:20	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 10:42	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 09:28		TAL CAN

Client Sample ID: ALB039:MW3SBA:G111113

Lab Sample ID: 240-31386-3

Date Collected: 11/11/13 09:59

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110657	11/20/13 19:25	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 14:11	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:24	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 10:42	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 09:59		TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW4SG:G111113

Lab Sample ID: 240-31386-4

Date Collected: 11/11/13 10:27

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 01:43	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 14:37	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:28	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 10:42	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 10:27		TAL CAN

Client Sample ID: ALB039:MW4SB:G111113

Lab Sample ID: 240-31386-5

Date Collected: 11/11/13 10:55

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 02:05	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 15:27	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:32	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		10	110118	11/15/13 10:43	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 10:55		TAL CAN

Client Sample ID: ALB039:MW8SB:G111113

Lab Sample ID: 240-31386-6

Date Collected: 11/11/13 11:28

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 02:27	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 15:53	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:36	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 10:55	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 11:28		TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW9SB:G111113

Lab Sample ID: 240-31386-7

Date Collected: 11/11/13 12:03

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 02:50	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 16:18	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:40	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	111362	11/25/13 11:04	JMB	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 12:03		TAL CAN

Client Sample ID: ALB039:MW6SB:G111113

Lab Sample ID: 240-31386-8

Date Collected: 11/11/13 12:38

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 03:12	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 16:44	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:52	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	111362	11/25/13 11:09	JMB	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 12:38		TAL CAN

Client Sample ID: ALB039:MW10SG:G111113

Lab Sample ID: 240-31386-9

Date Collected: 11/11/13 12:53

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 03:35	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 17:09	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 20:56	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	111362	11/25/13 11:14	JMB	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 12:53		TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW5SG:G111113

Lab Sample ID: 240-31386-10

Date Collected: 11/11/13 13:29

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 03:57	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 17:34	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:00	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 15:19	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 13:29		TAL CAN

Client Sample ID: ALB039:MW5SB:G111113

Lab Sample ID: 240-31386-11

Date Collected: 11/11/13 13:55

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 04:19	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 17:59	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:04	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 15:38	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110052	11/11/13 13:55		TAL CAN

Client Sample ID: ALB039:FBI:G111113

Lab Sample ID: 240-31386-12

Date Collected: 11/11/13 14:10

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 04:42	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 18:25	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:07	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 15:43	JAK	TAL CAN

Client Sample ID: ALB039:MW7SB:G111213

Lab Sample ID: 240-31386-13

Date Collected: 11/12/13 07:19

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 05:04	LRW	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SB:G111213

Lab Sample ID: 240-31386-13

Date Collected: 11/12/13 07:19

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 18:50	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:11	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 15:51	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 07:19		TAL CAN

Client Sample ID: ALB039:TBI:W111213

Lab Sample ID: 240-31386-14

Date Collected: 11/12/13 00:00

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 05:26	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 19:15	CMD	TAL BUF

Client Sample ID: ALB039:MW7SB:G111213A

Lab Sample ID: 240-31386-15

Date Collected: 11/12/13 07:19

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 05:48	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 20:05	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:15	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110118	11/15/13 15:57	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 07:19		TAL CAN

Client Sample ID: ALB039:MW7SG:G111213

Lab Sample ID: 240-31386-16

Date Collected: 11/12/13 07:56

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 06:10	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 20:31	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:19	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW7SG:G111213

Lab Sample ID: 240-31386-16

Date Collected: 11/12/13 07:56

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.3		1	111362	11/25/13 11:23	JMB	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 07:56		TAL CAN

Client Sample ID: ALB039:MW7SG:G111213A

Lab Sample ID: 240-31386-17

Date Collected: 11/12/13 07:56

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 06:33	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 20:56	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:23	RKT	TAL CAN
Total/NA	Analysis	160.2		1	109804	11/14/13 09:01	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 16:35	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 07:56		TAL CAN

Client Sample ID: ALB039:MW17B:G111213

Lab Sample ID: 240-31386-18

Date Collected: 11/12/13 08:31

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 06:55	LRW	TAL CAN
Total/NA	Prep	8011			152339	11/15/13 10:44	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 21:21	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:27	RKT	TAL CAN
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 16:35	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 08:31		TAL CAN

Client Sample ID: ALB039:MW15SB:G111213

Lab Sample ID: 240-31386-19

Date Collected: 11/12/13 09:04

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 07:18	LRW	TAL CAN
Total/NA	Prep	8011			152340	11/15/13 10:45	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 23:27	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:39	RKT	TAL CAN
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW15SB:G111213

Lab Sample ID: 240-31386-19

Date Collected: 11/12/13 09:04

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.3		1	110414	11/18/13 16:55	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 09:04		TAL CAN

Client Sample ID: ALB039:MW16SB:G111213

Lab Sample ID: 240-31386-20

Date Collected: 11/12/13 09:32

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 07:40	LRW	TAL CAN
Total/NA	Prep	8011			152340	11/15/13 10:45	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/15/13 23:53	CMD	TAL BUF
Total Recoverable	Prep	3005A			109802	11/14/13 08:53	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 21:43	RKT	TAL CAN
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 16:55	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 09:32		TAL CAN

Client Sample ID: ALB039:MW16DB:G111213

Lab Sample ID: 240-31386-21

Date Collected: 11/12/13 09:55

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 08:02	LRW	TAL CAN
Total/NA	Prep	8011			152340	11/15/13 10:45	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/16/13 00:18	CMD	TAL BUF
Total Recoverable	Prep	3005A			109818	11/14/13 09:18	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/18/13 23:45	RKT	TAL CAN
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 16:55	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 09:55		TAL CAN

Client Sample ID: ALB039:MW9DB:G111213

Lab Sample ID: 240-31386-22

Date Collected: 11/12/13 10:26

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110660	11/21/13 08:24	LRW	TAL CAN
Total/NA	Prep	8011			152340	11/15/13 10:45	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/16/13 00:43	CMD	TAL BUF
Total Recoverable	Prep	3005A			109818	11/14/13 09:18	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/19/13 00:09	RKT	TAL CAN
Total Recoverable	Analysis	6020		1	110607	11/19/13 17:13	NJT	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:MW9DB:G111213

Lab Sample ID: 240-31386-22

Date Collected: 11/12/13 10:26

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 17:27	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 10:26		TAL CAN

Client Sample ID: ALB039:FB2:W111213

Lab Sample ID: 240-31386-23

Date Collected: 11/12/13 11:10

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110890	11/21/13 13:17	LRW	TAL CAN
Total/NA	Prep	8011			152340	11/15/13 10:45	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/16/13 01:08	CMD	TAL BUF
Total Recoverable	Prep	3005A			109818	11/14/13 09:18	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/19/13 00:12	RKT	TAL CAN
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 17:27	JAK	TAL CAN

Client Sample ID: ALB039:RW4:W111213

Lab Sample ID: 240-31386-24

Date Collected: 11/12/13 10:45

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110890	11/21/13 13:39	LRW	TAL CAN
Total/NA	Prep	8011			152340	11/15/13 10:45	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/16/13 01:34	CMD	TAL BUF
Total Recoverable	Prep	3005A			109818	11/14/13 09:18	LPM	TAL CAN
Total Recoverable	Analysis	6020		1	110475	11/19/13 00:16	RKT	TAL CAN
Total Recoverable	Analysis	6020		1	110607	11/19/13 17:17	NJT	TAL CAN
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 17:27	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 10:45		TAL CAN

Client Sample ID: ALB039:RW4:W111213A

Lab Sample ID: 240-31386-25

Date Collected: 11/12/13 10:45

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	110890	11/21/13 14:02	LRW	TAL CAN
Total/NA	Prep	8011			152340	11/15/13 10:45	CMD	TAL BUF
Total/NA	Analysis	8011		1	152324	11/16/13 01:59	CMD	TAL BUF
Total Recoverable	Analysis	6020		1	110475	11/19/13 00:20	RKT	TAL CAN
Total Recoverable	Prep	3005A			109818	11/14/13 09:18	LPM	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Client Sample ID: ALB039:RW4:W111213A

Lab Sample ID: 240-31386-25

Date Collected: 11/12/13 10:45

Matrix: Water

Date Received: 11/13/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020		1	110607	11/19/13 17:21	NJT	TAL CAN
Total/NA	Analysis	160.2		1	110049	11/15/13 11:19	LCN	TAL CAN
Total/NA	Analysis	350.3		1	110414	11/18/13 17:27	JAK	TAL CAN
Total/NA	Analysis	Field Sampling		1	110056	11/12/13 10:45		TAL CAN

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Canton

Certification Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13 *
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14 *
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	12-31-13 *
Wisconsin	State Program	5	999518190	08-31-14

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton

Certification Summary

Client: Hull & Associates, Inc.
Project/Site: Albion-Sheridan Landfill

TestAmerica Job ID: 240-31386-1

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

TestAmerica Canton

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-31386 Chain of Custody



TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 31380

Client 1701

Site Name _____

Cooler unpacked by: [Signature]

Cooler Received on 11-13-13

Opened on 11-13-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A (CF +0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 4 (CF -1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 5 (CF +1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 8 (CF +1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

☒ See Multiple
Cooler Form

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 5 Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Did all bottles arrive in good condition (Unbroken)? Yes No

7. Could all bottle labels be reconciled with the COC? Yes No

8. Were correct bottle(s) used for the test(s) indicated? Yes No

9. Sufficient quantity received to perform indicated analyses? Yes No

10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC391902

11. Were VOAs on the COC? Yes No

12. Were air bubbles >6 mm in any VOA vials? Yes No NA

13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: [Signature]

15. SAMPLE CONDITION

Sample(s) VOA were received after the recommended holding time had expired.

Sample(s) (1x40) MW09DB 11/12/13 @ 1026 were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Hull

& associates, inc.

CHAIN OF CUSTODY RECORD

PAGE 1 OF 3

NO. 12473

Dublin, OH ☐
6397 Emerald Pkwy
Suite 200
Dublin, OH 43016
P: (614) 793-8777
F: (614) 793-9070

Indianapolis, IN ☐
5435 Castleway W. Dr.
Suite 119
Indianapolis, IN 46250
P: (800) 241-7173
F: (614) 793-9070

Mason, OH ☐
4770 Duke Dr.
Suite 300
Mason, OH 45040
P: (513) 459-9677
F: (513) 459-9869

Bedford, OH ☐
4 Hemisphere Way
Bedford, OH 44146
P: (440) 232-9945
F: (440) 232-9948

Toledo, OH ☒
3401 Glenfield Ave.
Suite 300
Toledo, OH 43614
P: (419) 385-2018
F: (419) 385-5487

Pittsburgh, PA ☐
300 Business Center Dr.
Suite 320
Pittsburgh, PA 15205
P: (412) 448-0315
F: (412) 446-0324

REPORT TO: RYAN MURPHY

Client: CITY OF ALBION

Site: ALBION LANDFILL

Project #: ALB039 Phase:

Samplers: MIKE CHERCHUI

SAMPLE TYPES	PRESERVATIVES	METALS
A-AIR C-ASBESTOS D-SEDIMENT G-GROUNDWATER P-PRODUCT S-SOIL W-WATER Z-OTHERS	A-Cool only, 4 deg. C B-HNO ₃ pH<2 C-H ₂ SO ₄ pH<2 D-NaOH pH>12 E-Zinc/Lithium + NaOH, pH>14 F-Na ₂ S ₂ O ₃ (0.005%) G-HCL, pH<2	H-EDTA I-5ml 1N HCL J-None K-Store in dark L-NH ₄ Cl M-Methanol N-Sodium bisulfate

All samples are kept at 4 degrees Celsius.

PROJECT NO.	SAMPLE LOCATION	SAMPLE TYPE & ID	NO. OF CONT.	METALS	COLLECTION DATE/TIME	ANALYSES										COMMENTS
ALB039	MW2SG	G111113	9	N	11-11-13 / 0903	3	3	1	1	1						
ALB039	MW2SB	G111113	9	N	11-11-13 / 0928	3	3	1	1	1						
ALB039	MW3SBA	G111113	9	N	11-11-13 / 0959	3	3	1	1	1						
ALB039	MW4SG	G111113	9	N	11-11-13 / 1027	3	3	1	1	1						
ALB039	MW4SB	G111113	9	N	11-11-13 / 1055	3	3	1	1	1						
ALB039	MW8SB	G111113	9	N	11-11-13 / 1128	3	3	1	1	1						
ALB039	MW9SB	G111113	9	N	11-11-13 / 1203	3	3	1	1	1						
ALB039	MW6SB	G111113	9	N	11-11-13 / 1238	3	3	1	1	1						
ALB039	MW10SG	G111113	9	N	11-11-13 / 1253	3	3	1	1	1						
ALB039	MW5SG	G111113	9	N	11-11-13 / 1329	3	3	1	1	1						
ALB039	MW5SB	G111113	9	N	11-11-13 / 1355	3	3	1	1	1						
ALB039	FB1	W111113	9	N	11-11-13 / 1410	3	3	1	1	1						

RELINQUISHED BY:	DATE: <u>11-12-13</u>
<u>[Signature]</u>	TIME: <u>1600</u>
RELINQUISHED BY:	DATE:
	TIME:
RELINQUISHED BY:	DATE:
	TIME:

RECEIVED BY:	DATE: <u>11-12-13</u>
<u>FREDERICK</u>	TIME: <u>1600</u>
RECEIVED BY:	DATE: <u>11-13-13 915</u>
	TIME:
RECEIVED FOR LAB BY:	DATE:
	TIME:

Deliver To: TEST AMERICA

Method of Delivery:

Airbill Number:

NOTES:

COOLER TEMPERATURE AS RECEIVED: °C

DISTRIBUTION:

WHITE - LAB USE (MUST BE RETURNED WITH REPORT)

YELLOW - LAB USE

PINK - RETAINED BY HULL

TURN AROUND TIME: 570 DAYS



Hull

& associates, inc.

CHAIN OF CUSTODY RECORD

PAGE 2 OF 3

NO. 12474

Dublin, OH ☐
6397 Emerald Pkwy
Suite 200
Dublin, OH 43016
P: (614) 793-8777
F: (614) 793-9070

Indianapolis, IN ☐
6435 Castleway W. Dr.
Suite 119
Indianapolis, IN 46250
P: (800) 241-7173
F: (614) 793-9070

Mason, OH ☐
4770 Duke Dr.
Suite 300
Mason, OH 45040
P: (513) 459-9677
F: (513) 459-9869

Bedford, OH ☐
4 Hemisphere Way
Bedford, OH 44146
P: (440) 232-9945
F: (440) 232-9946

Toledo, OH ☒
3401 Glendale Ave.
Suite 300
Toledo, OH 43614
P: (419) 385-2018
F: (419) 385-5487

Pittsburgh, PA ☐
300 Business Center Dr.
Suite 320
Pittsburgh, PA 15205
P: (412) 446-0315
F: (412) 446-0324

REPORT TO: RYAN MURPHY

Client: CITY OF ALBION

Site: ALBION LANDFILL

Project #: ALB039 Phase: -

Samplers: MIKE CHERCHI

SAMPLE TYPES
A-AIR
C-ASBESTOS
D-SEDIMENT
G-GROUNDWATER
P-PRODUCT
S-SOIL
W-WATER
Z-OTHERS

PRESERVATIVES
A-Cool only; <4 deg. C
B-HNO₃ pH<2
C-H₂SO₄ pH<2
D-NaOH pH>12
E-ZnAcetate + NaOH, pH<2
F-Na₂S₂O₅ (0.008%)
G-HCL pH<2
H-EDTA
I-5ml 1N HCL
J-None
K-Stored in dark
L-NH₄Cl
M-Methanol
S-Sodium bisulfite

METALS
F-Filtered
N-Not Filtered
B-Both

All samples are kept at 4 degrees Celsius.

PROJECT NO.	SAMPLE LOCATION	SAMPLE TYPE & ID	NO. OF CONT.	METALS	COLLECTION DATE/TIME	ANALYSES										COMMENTS
ALB039	MW7JB	G111213	9	N	11-12-13 / 0719	3	3	1	1	1						
ALB039	TB1	W111113	6	N	11-11-13 / -	3	3									
ALB039	MW7JB	G111213A	9	N	11-12-13 / 0719	3	3	1	1	1						
ALB039	MW7JB	G111213	9	N	11-12-13 / 0756	3	3	1	1	1						
ALB039	MW7JB	G111213A	9	N	11-12-13 / 0756	3	3	1	1	1						
ALB039	MW7JB	G111213	9	N	11-12-13 / 0831	3	3	1	1	1						
ALB039	MW155B	G111213	9	N	11-12-13 / 0904	3	3	1	1	1						
ALB039	MW165B	G111213	9	N	11-12-13 / 0932	3	3	1	1	1						
ALB039	MW16DB	G111213	9	N	11-12-13 / 0955	3	3	1	1	1						
ALB039	MW9DB	G111213	9	N	11-12-13 / 1026	3	3	1	1	1						
ALB039	FB2	W111213	9	N	11-12-13 / 1110	3	3	1	1	1						
ALB039	RW4	W111213	9	N	11-12-13 / 1045	3	3	1	1	1						

RELINQUISHED BY: [Signature] DATE: 11-12-13
TIME: 1600

RELINQUISHED BY: DATE: TIME:

RELINQUISHED BY: DATE: TIME:

RECEIVED BY: FEDEX DATE: 11-12-13
TIME: 1600

RECEIVED BY: DATE: TIME:

RECEIVED FOR LAB BY: DATE: TIME:

Deliver To: TESTAMERICA

Method of Delivery: FEDEX

Airbill Number: _____

NOTES: _____

COOLER TEMPERATURE AS RECEIVED: _____ °C

DISTRIBUTION: WHITE - LAB USE (MUST BE RETURNED WITH REPORT)
YELLOW - LAB USE
PINK - RETAINED BY HULL

TURN AROUND TIME: STD DAYS

& associates, inc.

PAGE 3 OF 3

NO. 12476

Pittsburgh, PA ☐
300 Business Center Dr.
Suite 320
Pittsburgh, PA 15205
P: (412) 446-0315
F: (412) 446-0324

REPORT TO: RYAN MURPHY

Client: CITY OF ALBION

Site: ALBION LANDFILL

Project #: 423035 Phase:

Samplers: Mike Charchi

SAMPLE TYPES

A-AIR
C-ASBESTOS
D-SEDIMENT
G-GROUNDWATER
P-PRODUCT
S-SOIL
W-WATER
Z-OTHERS

PRESERVATIVES

A - Cool only, <4 deg. C	H - EDTA
B - HNO_3 pH<2	I - 5ml 1:1 HCL
C - H_2SO_4 pH<2	J - None
D - NaOH pH>12	K - Stored in dark
E - ZnAcetate + NaOH, pH>9	L - NH_4Cl
F - $\text{Na}_2\text{S}_2\text{O}_3$ (0.008%)	M - Methylanol
G - HCl pH <2	S - Sodium bisulfate

METALS

F - Filtered
N - Not filtered
B - Both

All samples are kept at 4 degrees Celsius.

[illegible]

RELINQUISHED BY:

DATE: 11-13-13

RECEIVED BY:

DATE: 11-13-13

RELINQUISHED BY:

DATE-

RECEIVED BY:

DATE: 11-13-77 9:15

RELINQUISHED BY:

DATE: _____

RECEIVED FOR LAB BY:

DATE: _____

COOLER TEMPERATURE
AS RECEIVED:

°C

DISTRIBUTION:

DISTRIBUTION:
WHITE - LAB USE (MUST BE RETURNED WITH REPORT)
YELLOW - LAB USE
PINK - RETAINED BY HULL

Deliver To: TESTAMERICA

Method of Delivery: *FEDEX*

Airbill Number

NOTES:

TURN AROUND TIME: 570 DAYS



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
ALB039:MW2SG:G111113	240-31386-H-1	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW2SG:G111113	240-31386-I-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW2SB:G111113	240-31386-H-2	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW2SB:G111113	240-31386-I-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW3SBA:G111113	240-31386-H-3	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW3SBA:G111113	240-31386-I-3	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW4SG:G111113	240-31386-H-4	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW4SG:G111113	240-31386-I-4	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW4SB:G111113	240-31386-H-5	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW4SB:G111113	240-31386-I-5	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW8SB:G111113	240-31386-H-6	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW8SB:G111113	240-31386-I-6	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW9SB:G111113	240-31386-H-7	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW9SB:G111113	240-31386-I-7	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW6SB:G111113	240-31386-H-8	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW6SB:G111113	240-31386-I-8	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW10SG:G111113	240-31386-H-9	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW10SG:G111113	240-31386-I-9	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW5SG:G111113	240-31386-H-10	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW5SG:G111113	240-31386-I-10	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW5SB:G111113	240-31386-H-11	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW5SB:G111113	240-31386-I-11	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:FBI:G111113	240-31386-H-12	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:FBI:G111113	240-31386-I-12	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW7SB:G111213	240-31386-H-13	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW7SB:G111213	240-31386-I-13	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW7SB:G111213A	240-31386-H-15	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW7SB:G111213A	240-31386-I-15	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW7SG:G111213	240-31386-H-16	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW7SG:G111213	240-31386-I-16	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW7SG:G111213A	240-31386-H-17	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW7SG:G111213A	240-31386-I-17	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW17B:G111213	240-31386-H-18	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW17B:G111213	240-31386-I-18	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW15SB:G111213	240-31386-H-19	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW15SB:G111213	240-31386-I-19	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW16SB:G111213	240-31386-H-20	Plastic 500ml - with Sulfuric Acid	<2	_____	_____



<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
ALB039:MW16SB:G111213	240-31386-I-20	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW16DB:G111213	240-31386-IH-21	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW16DB:G111213	240-31386-I-21	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:MW9DB:G111213	240-31386-G-22	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:MW9DB:G111213	240-31386-H-22	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:FB2:W111213	240-31386-H-23	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:FB2:W111213	240-31386-I-23	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:RW4:W111213	240-31386-H-24	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:RW4:W111213	240-31386-I-24	Plastic 500ml - with Nitric Acid	<2	_____	_____
ALB039:RW4:W111213A	240-31386-H-25	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
ALB039:RW4:W111213A	240-31386-I-25	Plastic 500ml - with Nitric Acid	<2	_____	_____



Login Sample Receipt Checklist

Client: Hull & Associates, Inc.

Job Number: 240-31386-1

Login Number: 31386

List Number: 1

Creator: Goliszek, Gregory T

List Source: TestAmerica Buffalo

List Creation: 11/14/13 08:44 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8 #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	



APPENDIX B

Groundwater Monitoring Well Field Data Sheets,
Calibration Record Form, and Site Inspection Forms

Hull

& associates, inc.

3401 Glendale Avenue, Suite 300 □ Toledo, Ohio 43614

GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW2SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517)629-5535

MONITORING WELL DATA

COORDINATES: 7150 N 5100 E
CONDITION OF WELL: Good
GROUND SURFACE ELEVATION: -
CASING MATERIAL/DIAMETER: PVC 2"
TOTAL DEPTH (FROM GROUND SURFACE): -
TOP OF CASING ELEVATION: 977.55'
SCREENED INTERVAL (INCLUDING SAND PACK): -
TOTAL DEPTH (FROM TOP OF CASING): -
SCREENED FORMATION: Shallow Bedrock
SCREENED DEPTH (SCREEN ONLY): 912.62'-917.62'

WEATHER CONDITIONS

WEATHER: Overcast
WIND DIRECTION: WSW 5-10 mph
BAROMETRIC PRESSURE: 30.06 in
TEMPERATURE (°F): 42

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Charchol
MEASURED TOTAL DEPTH (FROM TOC): 62.40
STATIC WATER LEVEL (FROM TOC): 26.26
VOLUME OF STATIC WATER: -
GROUNDWATER ELEVATION: 951.29

PURGING DATA

DATE OF PURGING: 11/11/13
PURGING METHOD: Micropurge Pump
PURGING RATE: 300 ml/min
TIME OF PURGING: 0913
VOLUME PURGED: 1,125 gal/1000

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0913	0922	0925	0928			0928
Water Level	26.24	26.24	26.24	26.24			26.24
pH	7.31	6.30	6.27	6.24			6.24
Temp.	13.0	11.1	11.1	11.1			11.1
Spec. Cond.	480	932	946	950			950
Corr. Cond.							
Redox Pot.	171	47	46	47			47
D.O.	14.56	0	0	0			0
Turbidity	5	2	2	3			3

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 0928
SAMPLING METHOD: Micropurge Pump
SAMPLING RATE (IF USING DEDICATED PUMP): -
STATIC WATER LEVEL (AFTER SAMPLING): -

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW2SG
DETECTION: _____
ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517)629-5535

MONITORING WELL DATA

COORDINATES: _____ N
_____ E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: _____
TOTAL DEPTH (FROM GROUND SURFACE): _____
SCREENED INTERVAL (INCLUDING SAND PACK): _____
SCREENED FORMATION: _____

CASING MATERIAL/DIAMETER: _____
TOP OF CASING ELEVATION: 977.91'
TOTAL DEPTH (FROM TOP OF CASING): _____
SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Overcast
BAROMETRIC PRESSURE: 30.06 in

WIND DIRECTION: SW 5-10 mph
TEMPERATURE (°F): 41

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchol
MEASURED TOTAL DEPTH (FROM TOC): 37.43
VOLUME OF STATIC WATER: _____

STATIC WATER LEVEL (FROM TOC): 26.03
GROUNDWATER ELEVATION: 951.88

PURGING DATA

DATE OF PURGING: 11/11/13
PURGING METHOD: micropurge Pump
PURGING RATE: 400 ml/min

TIME OF PURGING: 0848
VOLUME PURGED: 1.50 gals/hr

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0848	0857	0900	0903			0903
Water Level	26.05	26.05	26.05	26.05			26.05
pH	7.45	7.04	7.06	7.02			7.02
Temp.	14.2	10.8	10.8	10.7			10.7
Spec. Cond.	792	605	605	605			605
Corr. Cond.							
Redox Pot.	192	188	190	189			189
D.O.	11.24	6.41	6.33	6.28			6.28
Turbidity	7	3	2	2			2

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 0903
SAMPLING METHOD: micropurge Pump

SAMPLING RATE (IF USING DEDICATED PUMP): 5100 ml/min
STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW3SBA

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517)629-5535

MONITORING WELL DATA

COORDINATES: _____ N
_____ E
CONDITION OF WELL: Good
GROUND SURFACE ELEVATION: _____
CASING MATERIAL/DIAMETER: _____
TOTAL DEPTH (FROM GROUND SURFACE): _____
TOP OF CASING ELEVATION: 979.84'
SCREENED INTERVAL (INCLUDING SAND PACK): _____
TOTAL DEPTH (FROM TOP OF CASING): _____
SCREENED FORMATION: _____
SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: overcast
WIND DIRECTION: WSW 5-10 mph
BAROMETRIC PRESSURE: 30.07 in
TEMPERATURE (°F): 42

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: _____
MEASURED TOTAL DEPTH (FROM TOC): 58.04
STATIC WATER LEVEL (FROM TOC): 32.18
VOLUME OF STATIC WATER: _____
GROUNDWATER ELEVATION: 947.66

PURGING DATA

DATE OF PURGING: 11/11/13
PURGING METHOD: micropurge pump
PURGING RATE: 400 ml/min
TIME OF PURGING: 0944
VOLUME PURGED: 1.50 gal/min

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0944	0953	0956	0959			0959
Water Level	32.15	32.15	32.15	32.15			32.15
pH	7.35	6.51	6.49	6.48			6.48
Temp.	10.8	10.9	10.9	11.0			11.0
Spec. Cond.	809	878	878	879			879
Corr. Cond.							
Redox Pot.	71	17	18	20			20
D.O.	7.54	0	0	0			0
Turbidity	15	10	9	9			9

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 0959
SAMPLING METHOD: micropurge pump
SAMPLING RATE (IF USING DEDICATED PUMP): _____
STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄:

0

%LEL:

0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW4SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: 5600 N

CONDITION OF WELL: Good

4300 E

GROUND SURFACE ELEVATION: -

CASING MATERIAL/DIAMETER: PVC 2"

TOTAL DEPTH (FROM GROUND SURFACE): -

TOP OF CASING ELEVATION: 978.05'

SCREENED INTERVAL (INCLUDING SAND PACK): -

TOTAL DEPTH (FROM TOP OF CASING): -

SCREENED FORMATION: Shallow Bedrock

SCREENED DEPTH (SCREEN ONLY): 905.03'-910.03'

WEATHER CONDITIONS

WEATHER: OVERCAST

WIND DIRECTION: WSW 5-10 mph

BAROMETRIC PRESSURE: 30.06 in

TEMPERATURE (°F): 42

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchoi

MEASURED TOTAL DEPTH (FROM TOC): 75.07 STATIC WATER LEVEL (FROM TOC): 30.49

VOLUME OF STATIC WATER: - GROUNDWATER ELEVATION: 947.56

PURGING DATA

DATE OF PURGING: 11/11/13

PURGING METHOD: micropurge Pump

PURGING RATE: 300 ml/min

TIME OF PURGING: 1040

VOLUME PURGED: 1.25 gallons

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1040	1049	1052	1055			1055
Water Level	30.11	30.11	30.11	30.11			30.11
pH	7.51	12.84	12.84	12.83			12.83
Temp.	9.6	10.5	10.5	10.5			10.5
Spec. Cond.	5180	5890	5910	5880			5880
Corr. Cond.							
Redox Pot.	24	-108	-105	-102			-102
D.O.	10.53	6.27	6.20	6.17			6.17
Turbidity	19	15	15	15			15

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1055

SAMPLING RATE (IF USING DEDICATED PUMP): -

SAMPLING METHOD: micropurge Pump

STATIC WATER LEVEL (AFTER SAMPLING): -

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄:

0

%LEL:

0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW4SG

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N
_____ E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: 978.05'

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Overcast

WIND DIRECTION: SW 10-15 mph

BAROMETRIC PRESSURE: 30.06 in

TEMPERATURE (°F): 42

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchol

MEASURED TOTAL DEPTH (FROM TOC): 39.41

STATIC WATER LEVEL (FROM TOC): 30.46

VOLUME OF STATIC WATER: _____

GROUNDWATER ELEVATION: 947.59

PURGING DATA

DATE OF PURGING: 11/11/13

PURGING METHOD: micropurge pump

PURGING RATE: 300 ml/min

TIME OF PURGING: 1012

VOLUME PURGED: 1.25 gallons

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1012	1021	1024	1027			1027
Water Level	30.43	30.43	30.43	30.43			30.43
pH	7.29	6.21	6.18	6.14			6.14
Temp.	9.7	11.5	11.6	11.6			11.6
Spec. Cond.	344	389	392	394			394
Corr. Cond.							
Redox Pot.	42	63	65	68			68
D.O.	11.94	0.08	0.04	0			0
Turbidity	63	58	58	57			57

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1027

SAMPLING RATE (IF USING DEDICATED PUMP): _____

SAMPLING METHOD: micropurge pump

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL: _____

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW5SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517)629-5535

MONITORING WELL DATA

COORDINATES: 5700 N 5300 E
CONDITION OF WELL: Good
GROUND SURFACE ELEVATION: - CASING MATERIAL/DIAMETER: PVC 2"
TOTAL DEPTH (FROM GROUND SURFACE): - TOP OF CASING ELEVATION: 970.01'
SCREENED INTERVAL (INCLUDING SAND PACK): - TOTAL DEPTH (FROM TOP OF CASING): -
SCREENED FORMATION: Shallow Bedrock SCREENED DEPTH (SCREEN ONLY): 894.51'-899.51'

WEATHER CONDITIONS

WEATHER: Rain WIND DIRECTION: WNW 5-10 mph
BAROMETRIC PRESSURE: 30.5 in TEMPERATURE (°F): 39

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchoi
MEASURED TOTAL DEPTH (FROM TOC): 77.74 STATIC WATER LEVEL (FROM TOC): 20.89
VOLUME OF STATIC WATER: _____ GROUNDWATER ELEVATION: 949.12

PURGING DATA

DATE OF PURGING: 11/11/13
PURGING METHOD: Peristaltic Pump TIME OF PURGING: 1340
PURGING RATE: 300 ml/min VOLUME PURGED: 1.25 gal/min

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1340	1349	1352	1355			1355
Water Level	20.85	20.85	20.85	20.85			20.85
pH	8.61	9.62	9.61	9.62			9.62
Temp.	9.2	10.0	10.0	10.0			10.0
Spec. Cond.	886	880	878	879			879
Corr. Cond.							
Redox Pot.	-61	6	10	12			12
D.O.	7.37	6.48	6.40	6.41			6.41
Turbidity	14	4	4	4			4

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1355 SAMPLING RATE (IF USING DEDICATED PUMP): 1
SAMPLING METHOD: Peristaltic Pump STATIC WATER LEVEL (AFTER SAMPLING): 1

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄:

0

%LEL:

0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW5SG

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517)629-5535

MONITORING WELL DATA

COORDINATES: _____ N
_____ E
GROUND SURFACE ELEVATION: _____
TOTAL DEPTH (FROM GROUND SURFACE): _____
SCREENED INTERVAL (INCLUDING SAND PACK): _____
SCREENED FORMATION: _____

CONDITION OF WELL: Good
CASING MATERIAL/DIAMETER: _____
TOP OF CASING ELEVATION: 970.69'
TOTAL DEPTH (FROM TOP OF CASING): _____
SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Rain
BAROMETRIC PRESSURE: 30.05 in

WIND DIRECTION: WNW 10-15 mph
TEMPERATURE (°F): 40

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchol
MEASURED TOTAL DEPTH (FROM TOC): 30.36
VOLUME OF STATIC WATER: _____

STATIC WATER LEVEL (FROM TOC): 20.07
GROUNDWATER ELEVATION: 950.62

PURGING DATA

DATE OF PURGING: 11/11/13
PURGING METHOD: Peristaltic pump
PURGING RATE: 300 ml/min

TIME OF PURGING: 1314
VOLUME PURGED: 1.25 gallons

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1314	1323	1326	1329			1329
Water Level	820.08	820.08	820.08	820.08			820.08
pH	8.23	7.61	7.56	7.55			7.55
Temp.	7.3	10.2	10.3	10.4			10.4
Spec. Cond.	1020	989	988	988			988
Corr. Cond.							
Redox Pot.	-35	-68	-65	-64			-64
D.O.	7.26	0	0	0			0
Turbidity	28	15	9	8			8

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1329
SAMPLING METHOD: Peristaltic pump

SAMPLING RATE (IF USING DEDICATED PUMP): _____
STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄:

0

%LEL:

0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW6SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: 5250 N
4200 E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: PVC 2"

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: 969.74'

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: Shallow Bedrock

SCREENED DEPTH (SCREEN ONLY): 894.77'-899.47'

WEATHER CONDITIONS

WEATHER: Rain

WIND DIRECTION: W 5-10 mph

BAROMETRIC PRESSURE: 30.04 in

TEMPERATURE (°F): 41

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchel

MEASURED TOTAL DEPTH (FROM TOC): 77.53

STATIC WATER LEVEL (FROM TOC): 22.17

VOLUME OF STATIC WATER: _____

GROUNDWATER ELEVATION: 947.57

PURGING DATA

DATE OF PURGING: 11/11/13

PURGING METHOD: Peristaltic Pump

PURGING RATE: 300 ml/min

TIME OF PURGING: 1223

VOLUME PURGED: 1.25 gal/w

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1233	1234	1235	1238			1238
Water Level	2236	2236	2236	2236			2236
pH	8.06	7.58	7.54	7.50			7.50
Temp.	7.9	8.4	8.4	8.5			8.5
Spec. Cond.	608	916	914	913			913
Corr. Cond.							
Redox Pot.	-25	-90	-87	-87			-87
D.O.	10.47	0	0	0			0
Turbidity	63	38	36	38			38

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1238

SAMPLING RATE (IF USING DEDICATED PUMP): 300 ml/min

SAMPLING METHOD: Peristaltic Pump

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL: _____

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW7SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N
_____ E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: 963.02'

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Overcast

WIND DIRECTION: NW 0-5 MPH

BAROMETRIC PRESSURE: 30.49 in

TEMPERATURE (°F): 21

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherubini

MEASURED TOTAL DEPTH (FROM TOC): 63.28 STATIC WATER LEVEL (FROM TOC): 15.39

VOLUME OF STATIC WATER: _____ GROUNDWATER ELEVATION: 947.63

PURGING DATA

DATE OF PURGING: 11/12/13

PURGING METHOD: Peristaltic Pump

PURGING RATE: 300 ml/min

TIME OF PURGING: 0700

VOLUME PURGED: 1.75

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0704	0713	0722	0731			0739
Water Level	15.40	15.40	15.40	15.40			15.40
pH	8.36	7.30	7.37	7.30			7.30
Temp.	17.4	11.1	11.1	11.1			11.1
Spec. Cond.	544	600	600	610			610
Corr. Cond.							
Redox Pot.	57	103	110	116			116
D.O.	6.87	1.23	1.21	1.18			1.18
Turbidity	231	73	73	72			72

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 0719

SAMPLING RATE (IF USING DEDICATED PUMP): 400 ml/min

SAMPLING METHOD: Peristaltic Pump

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW7SG

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N
_____ E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: 963.90'

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Overcast

WIND DIRECTION: NW 0-5 mph

BAROMETRIC PRESSURE: 30.51 in

TEMPERATURE (°F): 22

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherep

MEASURED TOTAL DEPTH (FROM TOC): 23.98

STATIC WATER LEVEL (FROM TOC): 15.73

VOLUME OF STATIC WATER: _____

GROUNDWATER ELEVATION: 948.17

PURGING DATA

DATE OF PURGING: 11/12/13

PURGING METHOD: Peristaltic Pump

PURGING RATE: 400 ml/min

TIME OF PURGING: 0741

VOLUME PURGED: 1.50 gal/min

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0741	0750	0753	0756			0756
Water Level	15.77	15.77	15.77	15.77			15.77
pH	6.79	6.86	6.84	6.87			6.87
Temp.	7.11	7.4	7.3	7.3			7.3
Spec. Cond.	697	661	658	659			658
Corr. Cond.							
Redox Pot.	-3	-43	-46	-50			-50
D.O.	2.11	0	0	0			0
Turbidity	72	9	7	3			3

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 0756

SAMPLING RATE (IF USING DEDICATED PUMP): 2100 ml/min

SAMPLING METHOD: Peristaltic Pump

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW8SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: 5650 N
3750 E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: -

CASING MATERIAL/DIAMETER: PVC 2"

TOTAL DEPTH (FROM GROUND SURFACE): -

TOP OF CASING ELEVATION: 981.88'

SCREENED INTERVAL (INCLUDING SAND PACK): -

TOTAL DEPTH (FROM TOP OF CASING): -

SCREENED FORMATION: Shallow Bedrock

SCREENED DEPTH (SCREEN ONLY): 909.83'-914.83'

WEATHER CONDITIONS

WEATHER: Overcast / Rain

WIND DIRECTION: WSW 5-10 mph

BAROMETRIC PRESSURE: 30.06 in

TEMPERATURE (°F): 42

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchui

MEASURED TOTAL DEPTH (FROM TOC): 75.30 STATIC WATER LEVEL (FROM TOC): 34.21

VOLUME OF STATIC WATER: - GROUNDWATER ELEVATION: 947.67

PURGING DATA

DATE OF PURGING: 11/11/13

PURGING METHOD: Microperforator Pump

PURGING RATE: 400 ml/min

TIME OF PURGING: 11/13

VOLUME PURGED: 1.50 gal/min

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1113	1122	1125	1129			1128
Water Level	34.18	34.18	34.18	34.18			34.18
pH	8.04	6.42	6.40	6.36			6.36
Temp.	9.7	10.5	10.5	10.5			10.5
Spec. Cond.	446	443	440	441			441
Corr. Cond.							
Redox Pot.	45	73	76	80			80
D.O.	4.0	0	0	0			0
Turbidity	12	24	24	24			24

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1128

SAMPLING RATE (IF USING DEDICATED PUMP): 400 ml/min

SAMPLING METHOD: Microperforator Pump

STATIC WATER LEVEL (AFTER SAMPLING): -

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH4: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW9DB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N
_____ E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: _____

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: clear

WIND DIRECTION: N 10-15 mph

BAROMETRIC PRESSURE: 30.54 in

TEMPERATURE (°F): 28

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: MIKE cheresh

MEASURED TOTAL DEPTH (FROM TOC): 72.25 STATIC WATER LEVEL (FROM TOC): 5.53

VOLUME OF STATIC WATER: _____ GROUNDWATER ELEVATION: _____

PURGING DATA

DATE OF PURGING: 11/12/13

PURGING METHOD: peristaltic pump

PURGING RATE: 400 ml/min

TIME OF PURGING: 1011

VOLUME PURGED: 1.50 gallons

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1011	1020	1023	1026			1026
Water Level	5.59	5.59	5.59	5.59			5.59
pH	7.77	7.34	7.33	7.32			7.32
Temp.	7.7	8.1	8.2	8.3			8.3
Spec. Cond.	619	638	638	639			639
Corr. Cond.							
Redox Pot.	-29	-50	-50	-51			-51
D.O.	6.20	0	0	0			0
Turbidity	16	10	11	10			10

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 1026

SAMPLING RATE (IF USING DEDICATED PUMP): 200 ml/min

SAMPLING METHOD: peristaltic pump

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW9SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: 5250 N
3750 E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: -

CASING MATERIAL/DIAMETER: PVC 2"

TOTAL DEPTH (FROM GROUND SURFACE): -

TOP OF CASING ELEVATION: 959.99'

SCREENED INTERVAL (INCLUDING SAND PACK): -

TOTAL DEPTH (FROM TOP OF CASING): -

SCREENED FORMATION: Shallow Bedrock

SCREENED DEPTH (SCREEN ONLY): 900.06'-905.06'

WEATHER CONDITIONS

WEATHER: RAIN

WIND DIRECTION: W 5-10 mph

BAROMETRIC PRESSURE: 30.05 in

TEMPERATURE (°F): 42

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: MIKE Cherchul

MEASURED TOTAL DEPTH (FROM TOC): 62.57 STATIC WATER LEVEL (FROM TOC): 12.48

VOLUME OF STATIC WATER: - GROUNDWATER ELEVATION: 947.51

PURGING DATA

DATE OF PURGING: 11/11/13

PURGING METHOD: Peristaltic Pump

PURGING RATE: 200 ml/min

TIME OF PURGING: 1145

VOLUME PURGED: 1.50 gallon

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	1145	1154	1157	1200	1203		1203
Water Level	12.55	12.55	12.55	12.55	12.55		12.55
pH	8.48	7.61	7.50	7.48	7.48		7.45
Temp.	8.9	7.3	9.4	7.5	9.5		9.5
Spec. Cond.	520	834	933	930	928		928
Corr. Cond.							
Redox Pot.	9	-95	-89	-89	-89		-99
D.O.	9.97	0	0	0	0		0
Turbidity	11	12	23	22	21		21

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1203

SAMPLING RATE (IF USING DEDICATED PUMP): 200 ml/min

SAMPLING METHOD: Peristaltic Pump

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW10SG

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N
_____ E

CONDITION OF WELL: Good

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: 950.03'

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Rain

WIND DIRECTION: WNW 5-10 mph

BAROMETRIC PRESSURE: 30.04 in

TEMPERATURE (°F): 41

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: mike cherchel

MEASURED TOTAL DEPTH (FROM TOC): 7.85

STATIC WATER LEVEL (FROM TOC): 3.23

VOLUME OF STATIC WATER: 0.75

GROUNDWATER ELEVATION: 946.80

PURGING DATA

DATE OF PURGING: 11/11/13

PURGING METHOD: Bailer

PURGING RATE: Variable

TIME OF PURGING: 0815

VOLUME PURGED: 1.75 gallons (Dry)

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time							
Water Level							
pH	<u>6.76</u>	<u>7.02</u>	<u>7.03</u>	<u>7.01</u>			<u>6.57</u>
Temp.	<u>16.0</u>	<u>12.0</u>	<u>12.0</u>	<u>11.9</u>	<u>(Dry)</u>		<u>9.5</u>
Spec. Cond.	<u>816</u>	<u>790</u>	<u>792</u>	<u>792</u>			<u>790</u>
Corr. Cond.							
Redox Pot.							
D.O.							
Turbidity							

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X <u>4.62</u>	X 3	<u>2.25</u>
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/11/13 1253

SAMPLING RATE (IF USING DEDICATED PUMP): 216 ml/min.

SAMPLING METHOD: Bailer

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄:

0

%LEL:

0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW15SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517)629-5535

MONITORING WELL DATA

COORDINATES: _____ N
_____ E
GROUND SURFACE ELEVATION: _____
TOTAL DEPTH (FROM GROUND SURFACE): _____
SCREENED INTERVAL (INCLUDING SAND PACK): _____
SCREENED FORMATION: _____
CONDITION OF WELL: Good
CASING MATERIAL/DIAMETER: _____
TOP OF CASING ELEVATION: 954.35'
TOTAL DEPTH (FROM TOP OF CASING): _____
SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Clear
BAROMETRIC PRESSURE: 30.53 in
WIND DIRECTION: NNW 0-5 mph
TEMPERATURE (°F): 25

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Chamberlain
MEASURED TOTAL DEPTH (FROM TOC): 31.57
VOLUME OF STATIC WATER: _____
STATIC WATER LEVEL (FROM TOC): 7.27
GROUNDWATER ELEVATION: 947.08

PURGING DATA

DATE OF PURGING: 11/12/13
PURGING METHOD: Peristaltic Pump
PURGING RATE: 400 ml/min
TIME OF PURGING: 0849
VOLUME PURGED: 1.50 gal

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0849	0853	0901	0904			0904
Water Level	6.28	6.28	6.28	6.28			6.28
pH	7.47	7.47	7.47	7.39			7.39
Temp.	6.1	7.2	7.3	7.4			7.4
Spec. Cond.	944	928	924	921			921
Corr. Cond.							
Redox Pot.	3	-97	-97	-97			-97
D.O.	3.64	0	0	0			0
Turbidity	116	21	20	19			19

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 0904
SAMPLING METHOD: Peristaltic Pump
SAMPLING RATE (IF USING DEDICATED PUMP): 400 ml/min
STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH4: _____

%LEL: _____

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW16DB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517)629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N

CONDITION OF WELL: Good

_____ E

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: 952.06'

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Clear

WIND DIRECTION: N 0-5 mph

BAROMETRIC PRESSURE: 30.54 in

TEMPERATURE (°F): 28

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherchov

MEASURED TOTAL DEPTH (FROM TOC): 76.59

STATIC WATER LEVEL (FROM TOC): 4.35

VOLUME OF STATIC WATER: _____

GROUNDWATER ELEVATION: 947.71

PURGING DATA

DATE OF PURGING: 11/12/13

PURGING METHOD: Peristaltic Pump

PURGING RATE: 400 ml/min

TIME OF PURGING: 0740

VOLUME PURGED: 1.50 gallons

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0740	0749	0752	0755			0755
Water Level	8.63	8.63	8.63	8.63			8.63
pH	7.71	7.42	7.42	7.41			7.41
Temp.	7.7	7.9	7.9	7.9			7.9
Spec. Cond.	553	611	613	610			610
Corr. Cond.							
Redox Pot.	-71	-71	-72	-72			-72
D.O.	7.34	0	0	0			0
Turbidity	14	9	8	8			8

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 0955

SAMPLING RATE (IF USING DEDICATED PUMP): 400 ml/min

SAMPLING METHOD: Peristaltic Pump

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH4: 0

%LEL: 0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW16SB

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517)629-5535

MONITORING WELL DATA

COORDINATES: _____ N
_____ E

CONDITION OF WELL: 601

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: 952.07'

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Clear
BAROMETRIC PRESSURE: 30.54 in

WIND DIRECTION: N 5-10 mph
TEMPERATURE (°F): 27

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cheresh
MEASURED TOTAL DEPTH (FROM TOC): 37.25
VOLUME OF STATIC WATER: _____

STATIC WATER LEVEL (FROM TOC): 4.97
GROUNDWATER ELEVATION: 947.10

PURGING DATA

DATE OF PURGING: 11/12/13
PURGING METHOD: Peristaltic Pump
PURGING RATE: 400 ml/min

TIME OF PURGING: 0712
VOLUME PURGED: 1.50 gallons

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0712	0726	0739	0752			0832
Water Level	5.00	5.00	5.00	5.00			5.00
pH	7.01	7.33	7.34	7.33			7.33
Temp.	7.4	8.2	8.3	8.3			8.3
Spec. Cond.	921	936	930	929			929
Corr. Cond.							
Redox Pot.	-51	-69	-71	-72			-72
D.O.	6.07	0	0	0			0
Turbidity	53	14	8	7			7

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 0732
SAMPLING METHOD: Peristaltic Pump

SAMPLING RATE (IF USING DEDICATED PUMP): 400 ml/min
STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: 0

%LEL: 0

Hull

& associates, inc.
3401 Glendale Avenue, Suite 300 □ Toledo, Ohio 43614

GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: MW17B
DETECTION: _____
ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill PROJECT NUMBER: ALB039
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224 TELEPHONE: (517) 629-5535
CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N
_____ E
CONDITION OF WELL: Good
GROUND SURFACE ELEVATION: _____ CASING MATERIAL/DIAMETER: _____
TOTAL DEPTH (FROM GROUND SURFACE): _____ TOP OF CASING ELEVATION: _____
SCREENED INTERVAL (INCLUDING SAND PACK): _____ TOTAL DEPTH (FROM TOP OF CASING): _____
SCREENED FORMATION: _____ SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Clear WIND DIRECTION: NNW 0-5 mph
BAROMETRIC PRESSURE: 30.53 in TEMPERATURE (°F): 24

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Cherish
MEASURED TOTAL DEPTH (FROM TOC): 80.14 STATIC WATER LEVEL (FROM TOC): 13.01
VOLUME OF STATIC WATER: _____ GROUNDWATER ELEVATION: _____

PURGING DATA

DATE OF PURGING: 11/12/13
PURGING METHOD: Peristaltic Pump TIME OF PURGING: 0316
PURGING RATE: 500 ml/min VOLUME PURGED: 200 gal

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time	0316	0325	0328	0331			0331
Water Level	13.07	13.07	13.07	13.07			13.07
pH	7.68	7.83	7.88	7.90			7.90
Temp.	7.2	7.3	7.9	7.9			7.5
Spec. Cond.	307	269	268	268			268
Corr. Cond.							
Redox Pot.	-102	-217	-220	-222			-222
D.O.	3.92	5.35	5.25	5.17			5.18
Turbidity	49	16	15	16			16

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 0331 SAMPLING RATE (IF USING DEDICATED PUMP): 210 ml/min
SAMPLING METHOD: Peristaltic Pump STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄:

0

%LEL:

0

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: RW04

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill

PROJECT NUMBER: ALB039

ADDRESS: 29975 East Erie Road, Albion, Michigan 49224

TELEPHONE: (517) 629-5535

CONTACT: Leroy Schmidt

MONITORING WELL DATA

COORDINATES: _____ N

CONDITION OF WELL: Good

_____ E

GROUND SURFACE ELEVATION: _____

CASING MATERIAL/DIAMETER: _____

TOTAL DEPTH (FROM GROUND SURFACE): _____

TOP OF CASING ELEVATION: _____

SCREENED INTERVAL (INCLUDING SAND PACK): _____

TOTAL DEPTH (FROM TOP OF CASING): _____

SCREENED FORMATION: _____

SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: Clear

WIND DIRECTION: NW 5-10 mph

BAROMETRIC PRESSURE: 30.55 in

TEMPERATURE (°F): 30

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: Mike Scherck

MEASURED TOTAL DEPTH (FROM TOC): _____

STATIC WATER LEVEL (FROM TOC): _____

VOLUME OF STATIC WATER: _____

GROUNDWATER ELEVATION: _____

PURGING DATA

DATE OF PURGING: 11/12/13

PURGING METHOD: Force

PURGING RATE: Variable

TIME OF PURGING: 1035

VOLUME PURGED: 20 gal.

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time							
Water Level							
pH	6.95						6.95
Temp.	12.3						12.3
Spec. Cond.	832						832
Corr. Cond.							
Redox Pot.	-71						-71
D.O.	10.62						9.62
Turbidity	3						3

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: 11/12/13 1045

SAMPLING RATE (IF USING DEDICATED PUMP): _____

SAMPLING METHOD: Force

STATIC WATER LEVEL (AFTER SAMPLING): _____

NOTES

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL: _____

%CH₄: _____

%LEL: _____

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GROUNDWATER MONITORING WELL FIELD DATA SHEET

MONITORING POINT: RW06

DETECTION: _____

ASSESSMENT: _____

FACILITY INFORMATION

NAME: Albion-Sheridan Twp. Landfill
ADDRESS: 29975 East Erie Road, Albion, Michigan 49224
CONTACT: Leroy Schmidt

PROJECT NUMBER: ALB039
TELEPHONE: (517) 629-5535

MONITORING WELL DATA

COORDINATES: _____ N
_____ E
CONDITION OF WELL: Good
GROUND SURFACE ELEVATION: _____
CASING MATERIAL/DIAMETER: _____
TOTAL DEPTH (FROM GROUND SURFACE): _____
TOP OF CASING ELEVATION: _____
SCREENED INTERVAL (INCLUDING SAND PACK): _____
TOTAL DEPTH (FROM TOP OF CASING): _____
SCREENED FORMATION: _____
SCREENED DEPTH (SCREEN ONLY): _____

WEATHER CONDITIONS

WEATHER: clear
WIND DIRECTION: NW 5-10 mph
BAROMETRIC PRESSURE: 30.55 in
TEMPERATURE (°F): 30

FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: _____
MEASURED TOTAL DEPTH (FROM TOC): 1
STATIC WATER LEVEL (FROM TOC): -
VOLUME OF STATIC WATER: 1
GROUNDWATER ELEVATION: -

PURGING DATA

DATE OF PURGING: 11/12/13
PURGING METHOD: Faucet
TIME OF PURGING: 1110
PURGING RATE: -
VOLUME PURGED: -

WELL VOLUMES PURGED

	Initial	1	2	3	4	5	6/Final
Time							
Water Level							
pH							
Temp.							
Spec. Cond.							
Corr. Cond.							
Redox Pot.							
D.O.							
Turbidity							

VOLUME TO PURGE CALCULATION TABLE

Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X	X 3	
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

SAMPLING DATA

DATE/TIME OF SAMPLING: -
SAMPLING RATE (IF USING DEDICATED PUMP): -
SAMPLING METHOD: -
STATIC WATER LEVEL (AFTER SAMPLING): -

NOTES

outside faucet was turned off, Resident was not home. sample was not collected.

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL:

%CH₄: -

%LEL: -

Calibration Record

ALBION LANDFILL

Instruments:

HORIBA U-52

GAScope 623

	1	2	3	4	5	6
Date:	11-11-13	11-11-13	11-11-13	11-12-13	11-12-13	
Time:	0430	1204	1800	0430	1120	
pH 4:	4.00	4.98	4.99	4.00	4.00	
pH 7:	—	6.98	7.01	—	6.98	
pH 10:	—	9.99	10.00	—	9.99	
pH Slope:	—	—	—	—	—	
Cond. 4490:	4490	4500	4500	4490	4480	
Cond. Slope:	—	—	—	—	—	
D.O.	—	—	—	—	—	
CH ₄ 2.5 %:	2.5	—	—	—	—	
LEL 50%:	50	—	—	—	—	

Units

pH: S.U.
 Conductivity: umhos/cm
 D.O. mg/L

Date: 1/24/13

Time On-Site: 0850

Time Off-Site: 1148

Site: ALBION LANDFILL

Weather: clear Temp: 9°F

Inspector: mike charchel

Wind Direction: N 0-5 mph

Signature: [Signature]

Barometric Pressure: 30.52 in

Inspection Tasks

Existing Monitoring System

A. Condition of Monitoring Well System: All wells are locked and secure. pads are covered by snow.

Condition / Integrity of Landfill

A. Erosion none noticed

B. Stressed Vegetation none noticed cap is snow covered.

C. Physical Damage None noticed

D. Surface Water Control Structures Good

Perimeter Fencing and Warning Signs

A. Condition of Fencing: Good

B. Warning Signs: Pasteed

Date: 7/16/13

Time On-Site: 0844

Time Off-Site: 1200

Site: ALBION LANDFILL

Weather: clear Temp: 85

Inspector: MIKE CHERCH

Wind Direction: W 5-10 mph

Signature: [Signature]

Barometric Pressure: 30.34 in

Inspection Tasks

Existing Monitoring System

A. Condition of Monitoring Well System: PADs ARE COVERED WITH VEGETATION
WELLS ARE LOCKED AND SECURE.

Condition / Integrity of Landfill

A. Erosion NONE NOTICED

B. Stressed Vegetation NONE NOTICED

C. Physical Damage NONE NOTICED

D. Surface Water Control Structures GOOD

Perimeter Fencing and Warning Signs

A. Condition of Fencing: Good. A large portion of the fence is
covered with vegetation. Some of the perimeter fencing is
inaccessible due to the vegetation

B. Warning Signs: Some are faded. Entrance to the landfill has
a sign clearly marked.

APPENDIX C

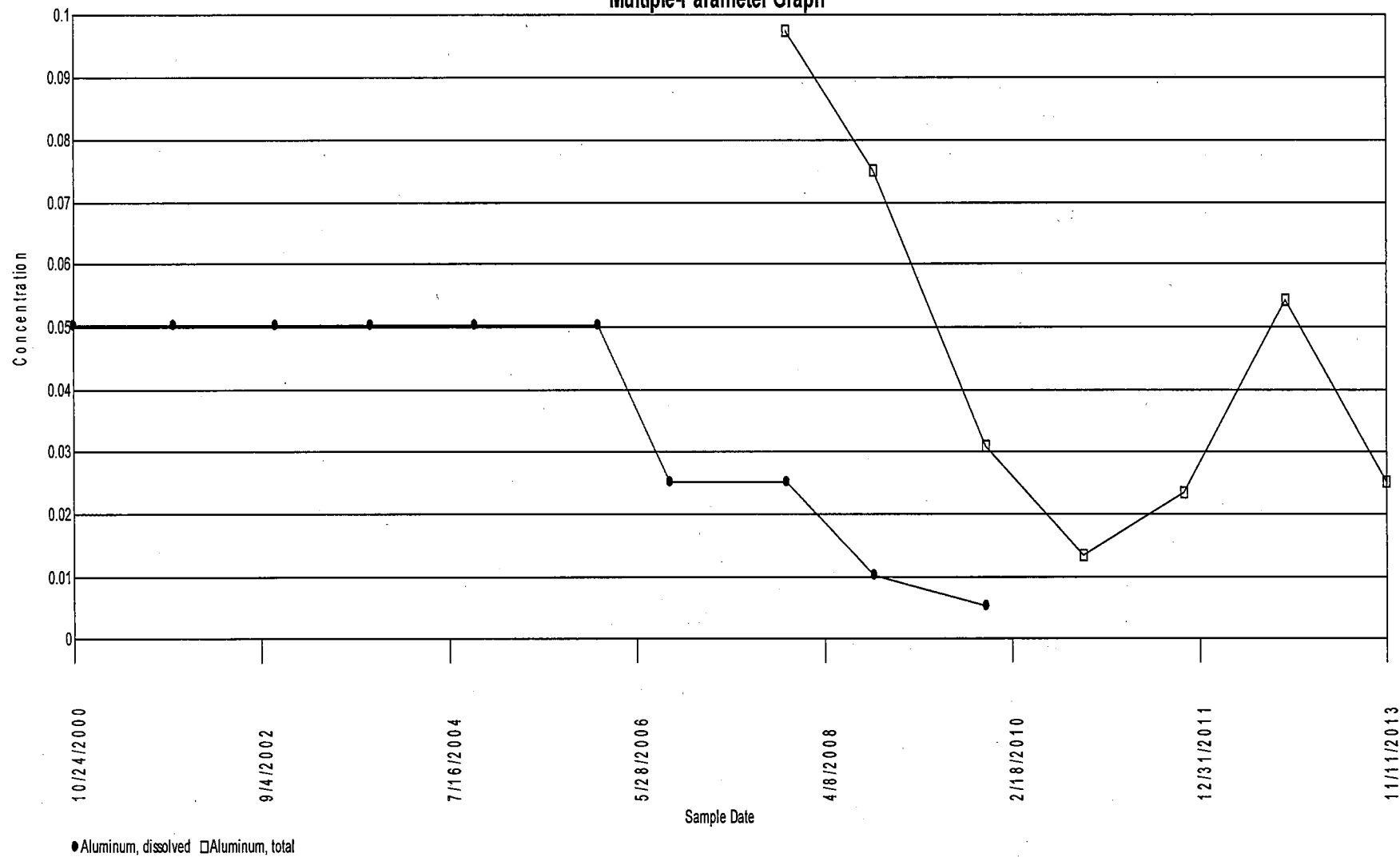
Monitoring and Residential Well Time-Series Plots

ALUMINUM

ALBION-SHERIDAN TOWNSHIP LANDFILL

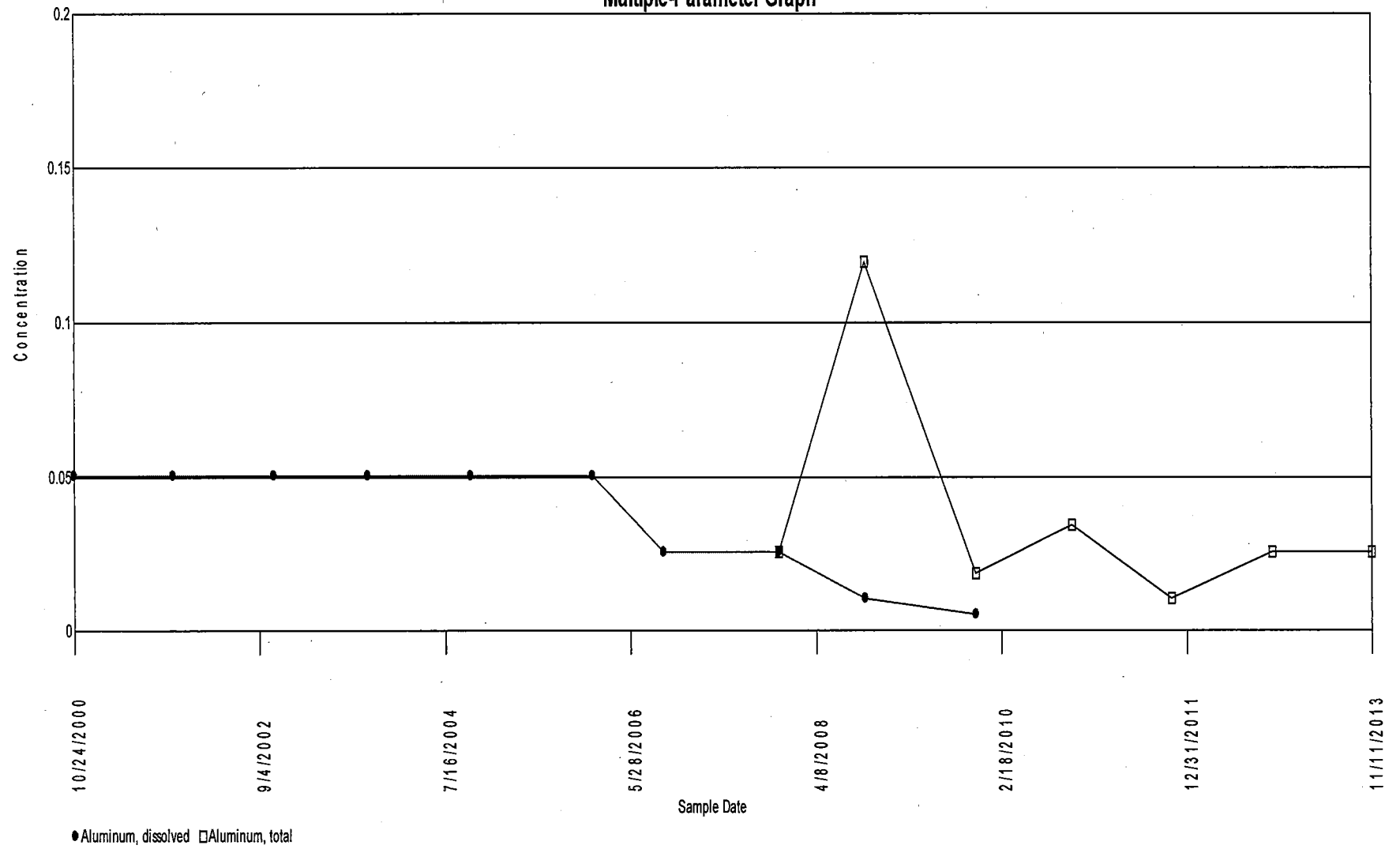
MW02SB

Multiple-Parameter Graph



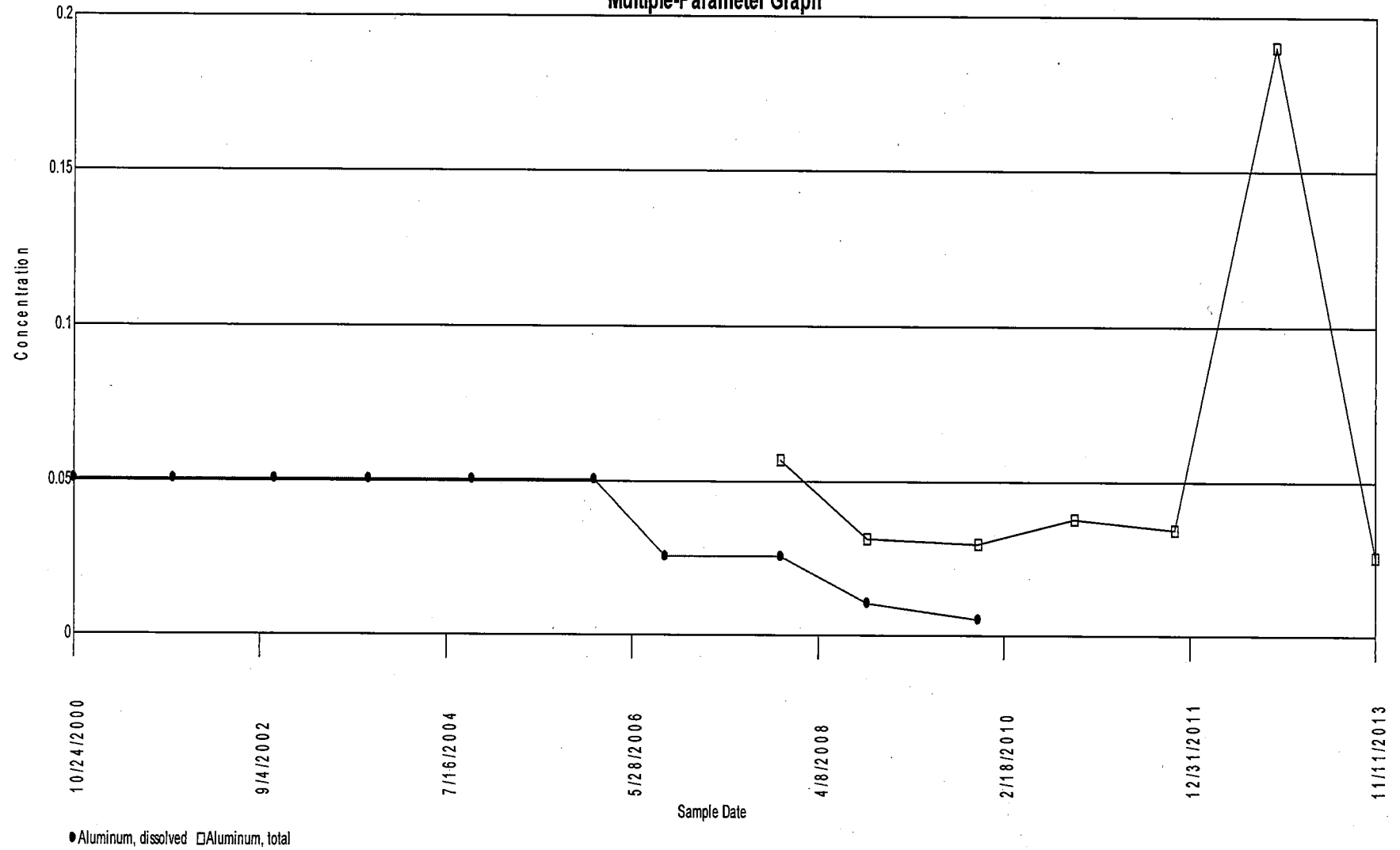
ALBION-SHERIDAN TOWNSHIP LANDFILL

MW02SG
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

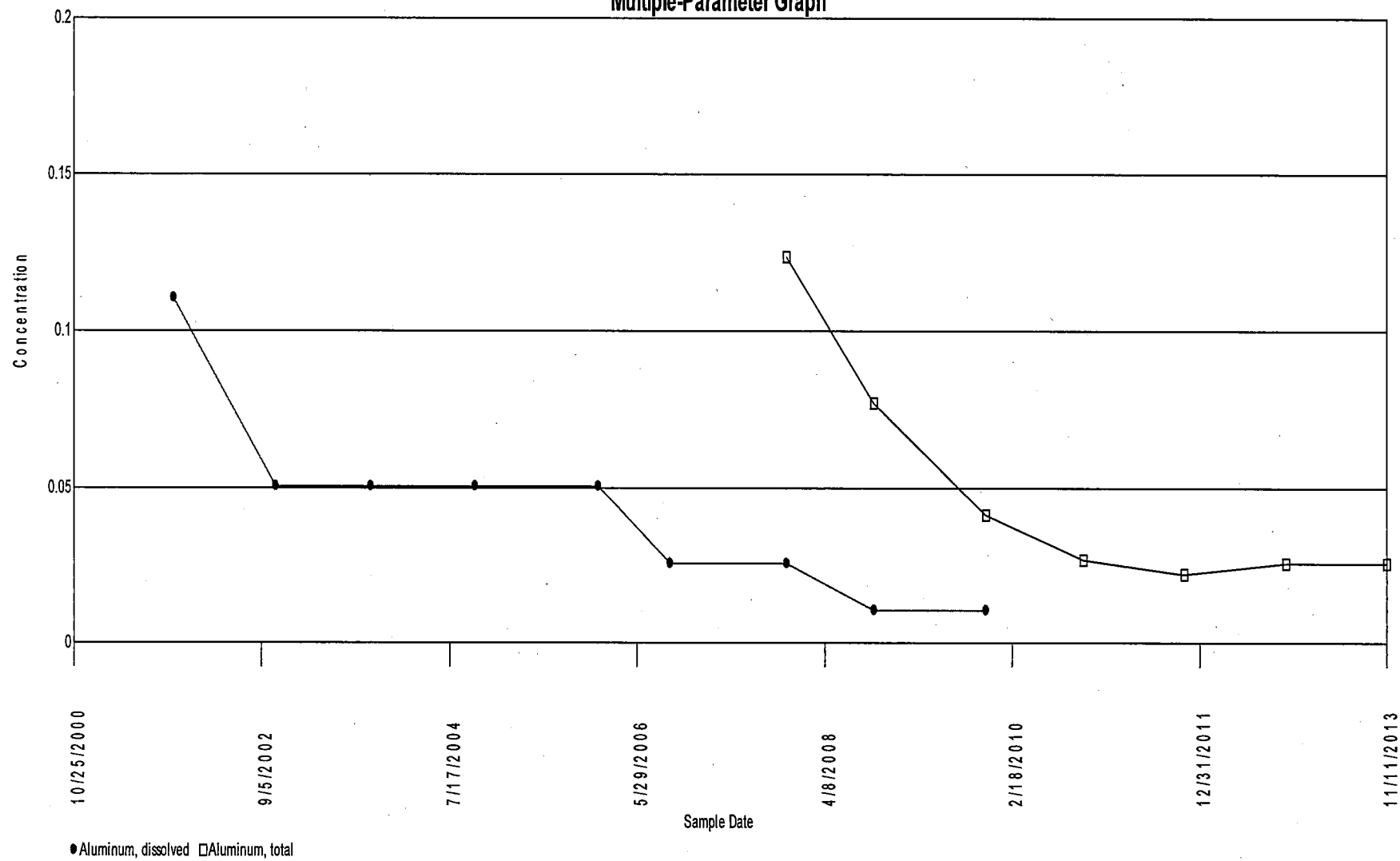
MW03SBA
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

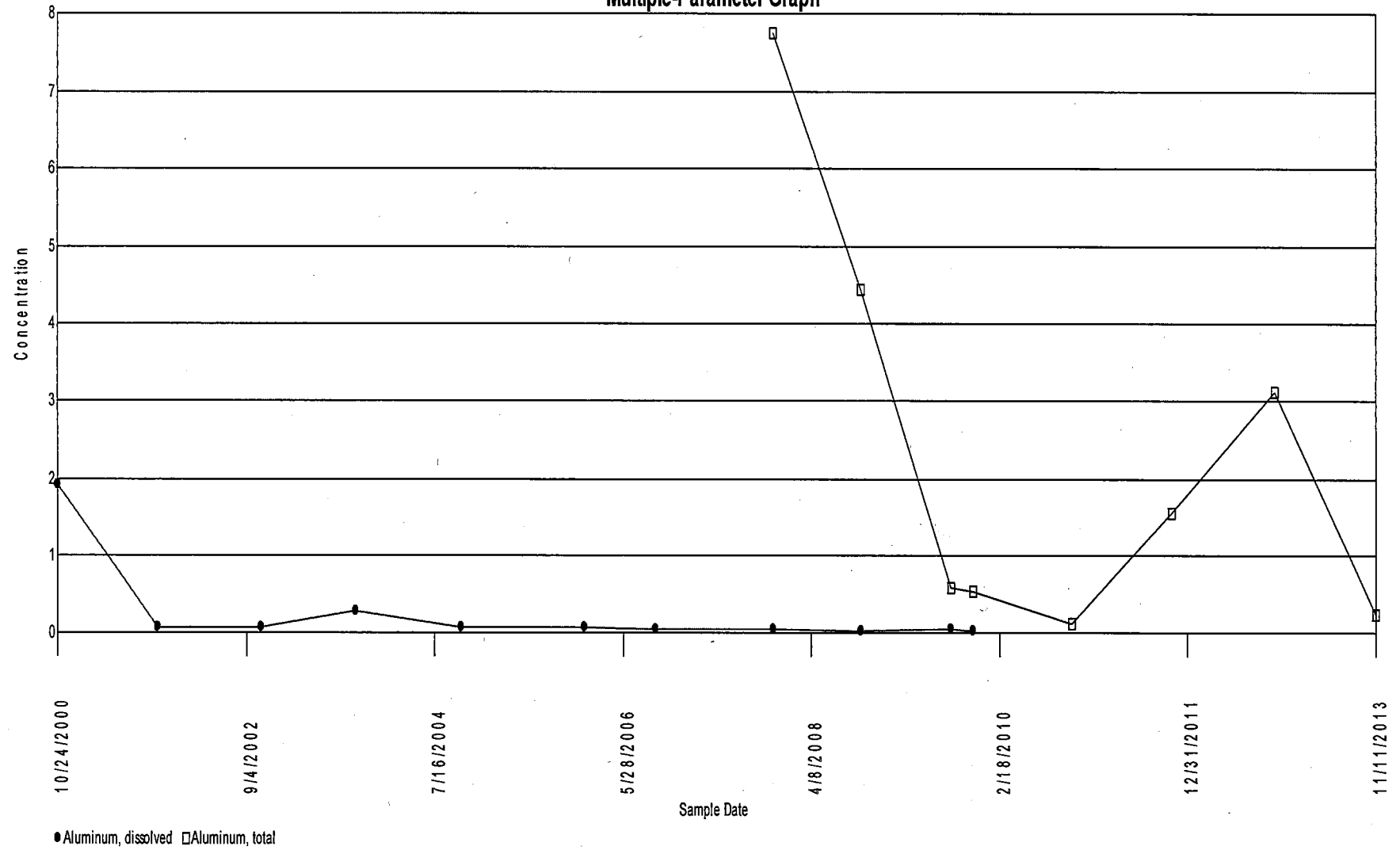
MW04SB

Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW04SG
Multiple-Parameter Graph



Multiple-Parameter Graph

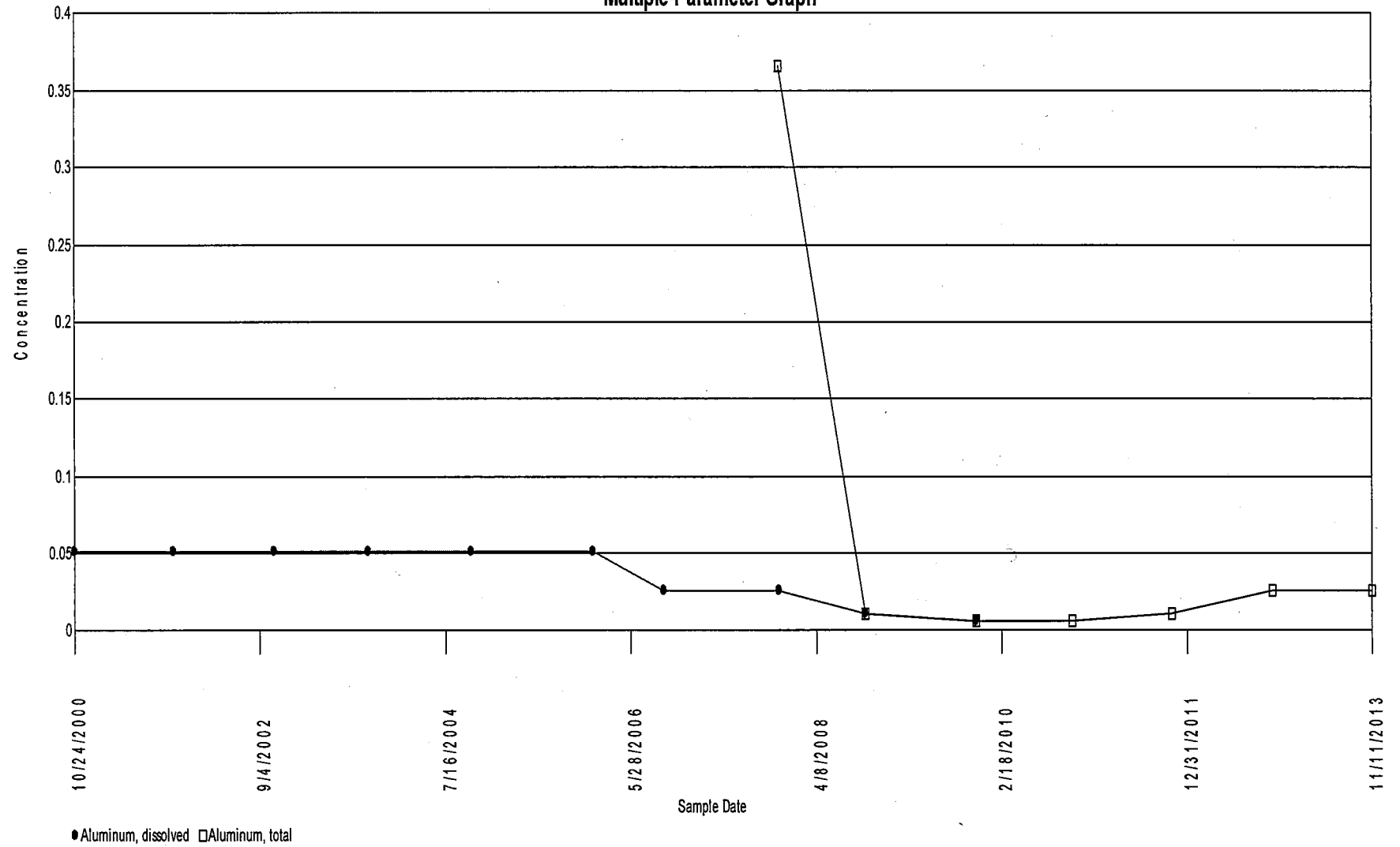
MW04SG

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW05SB

Multiple-Parameter Graph



Multiple-Parameter Graph

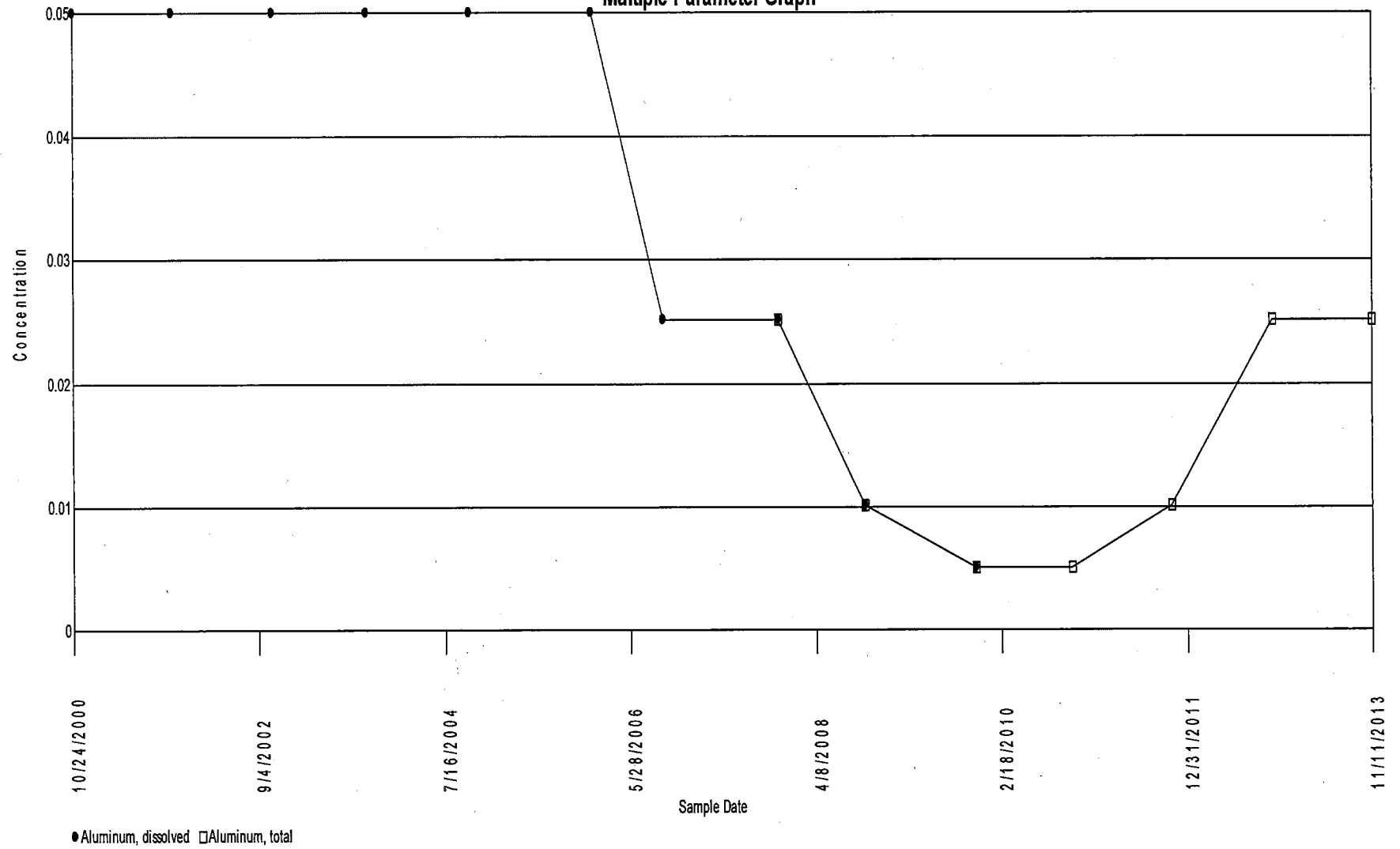
MW05SB

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW05SG

Multiple-Parameter Graph



Multiple-Parameter Graph

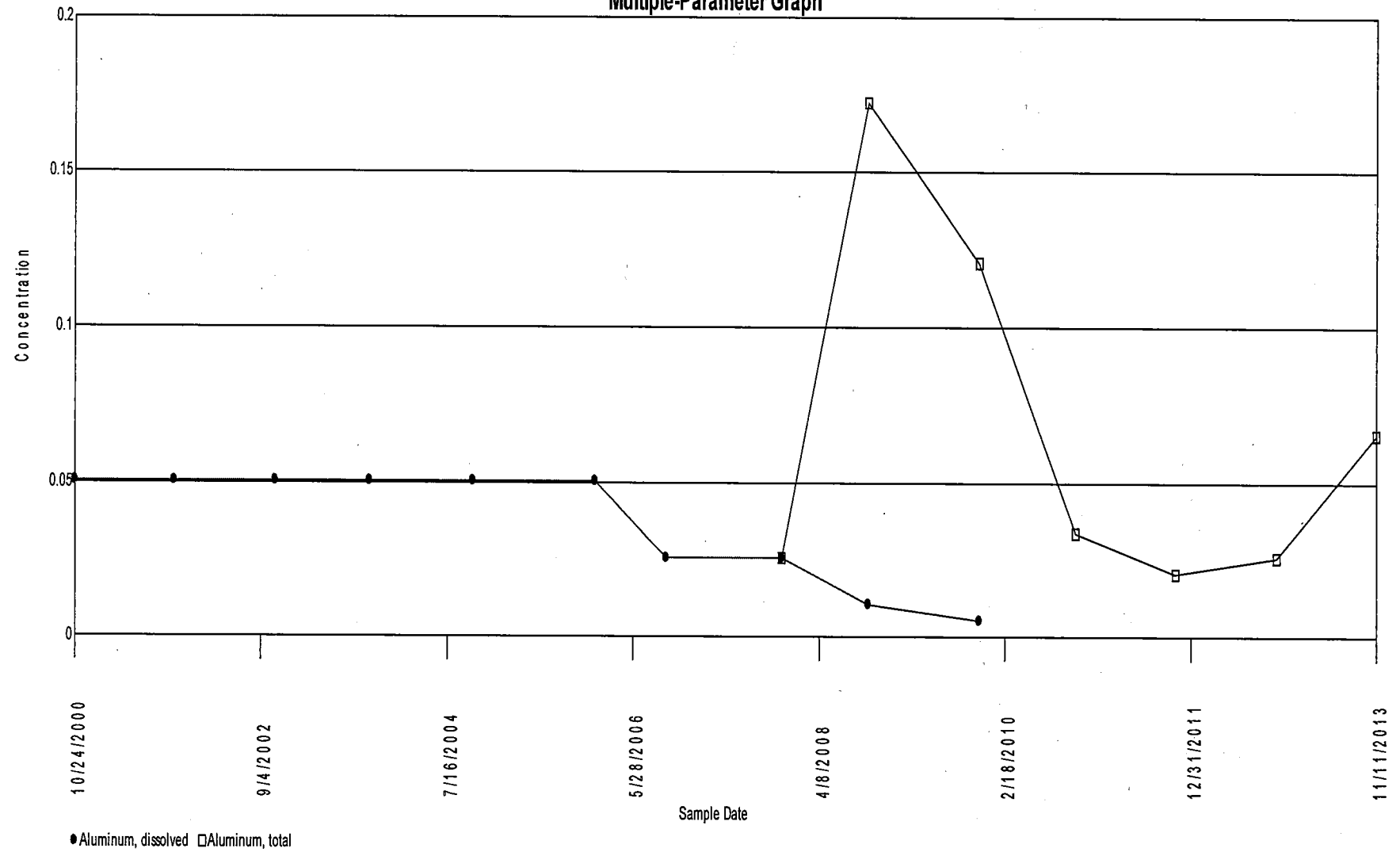
MW05SG

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW06SB

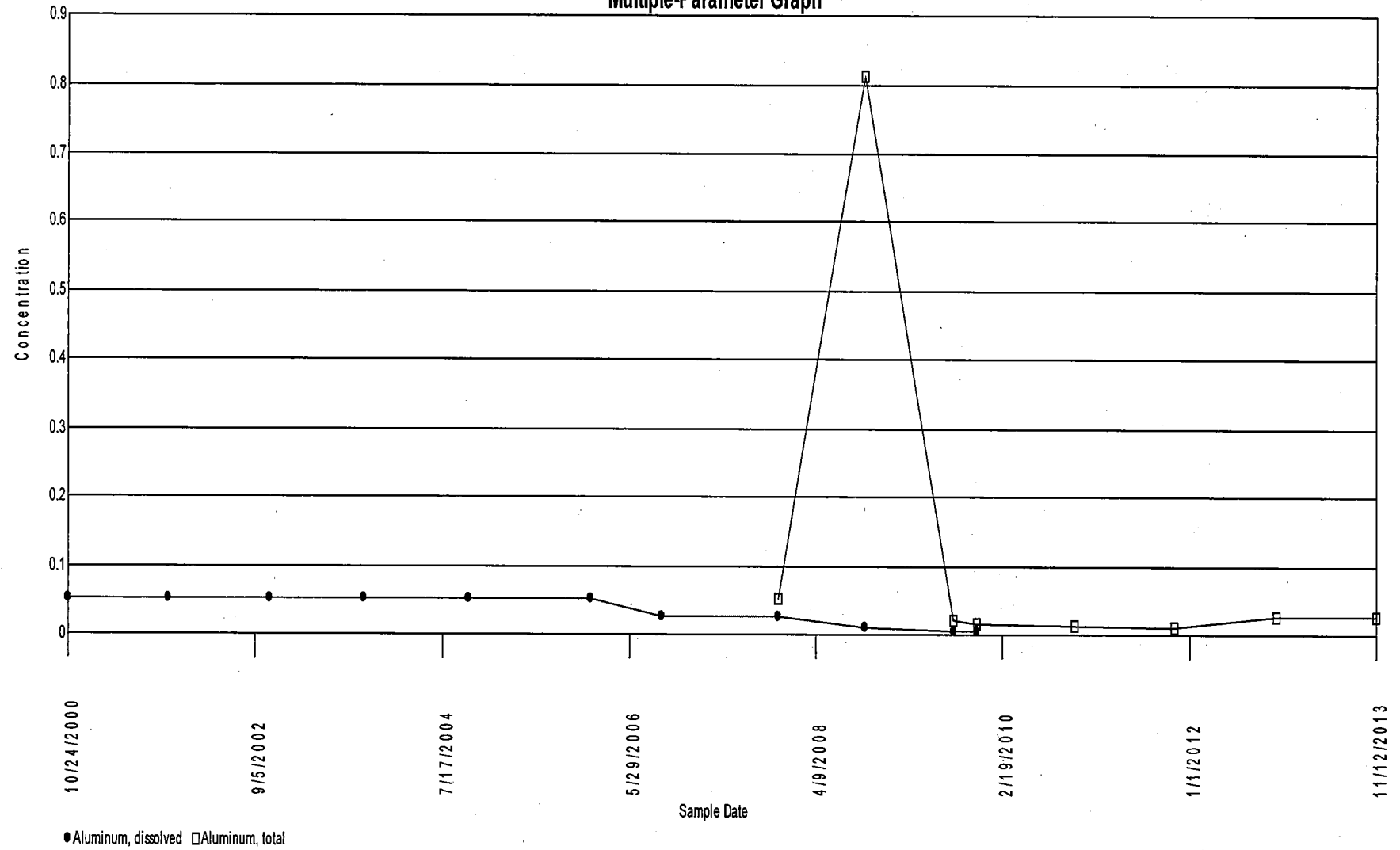
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW07SB

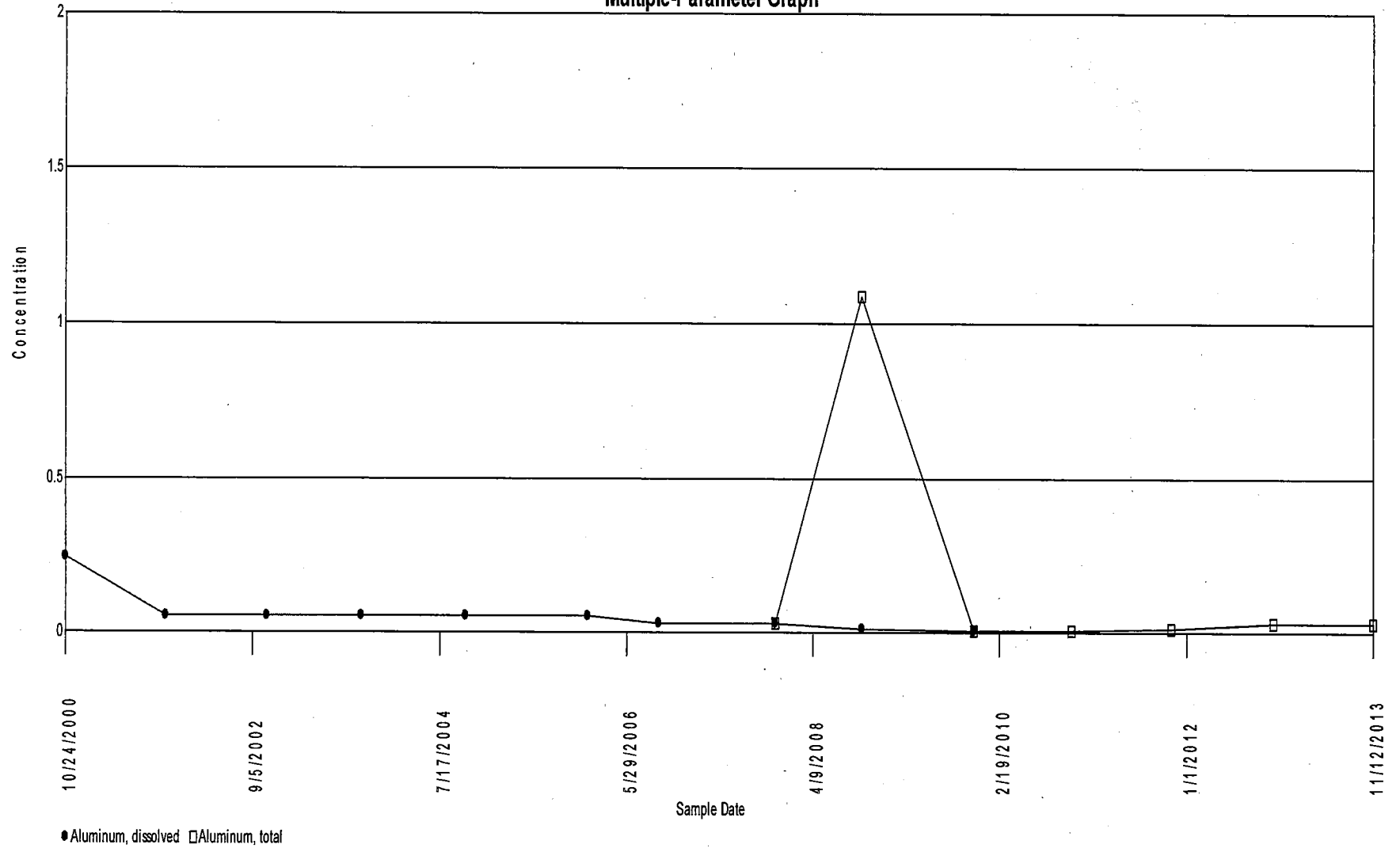
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW07SG

Multiple-Parameter Graph



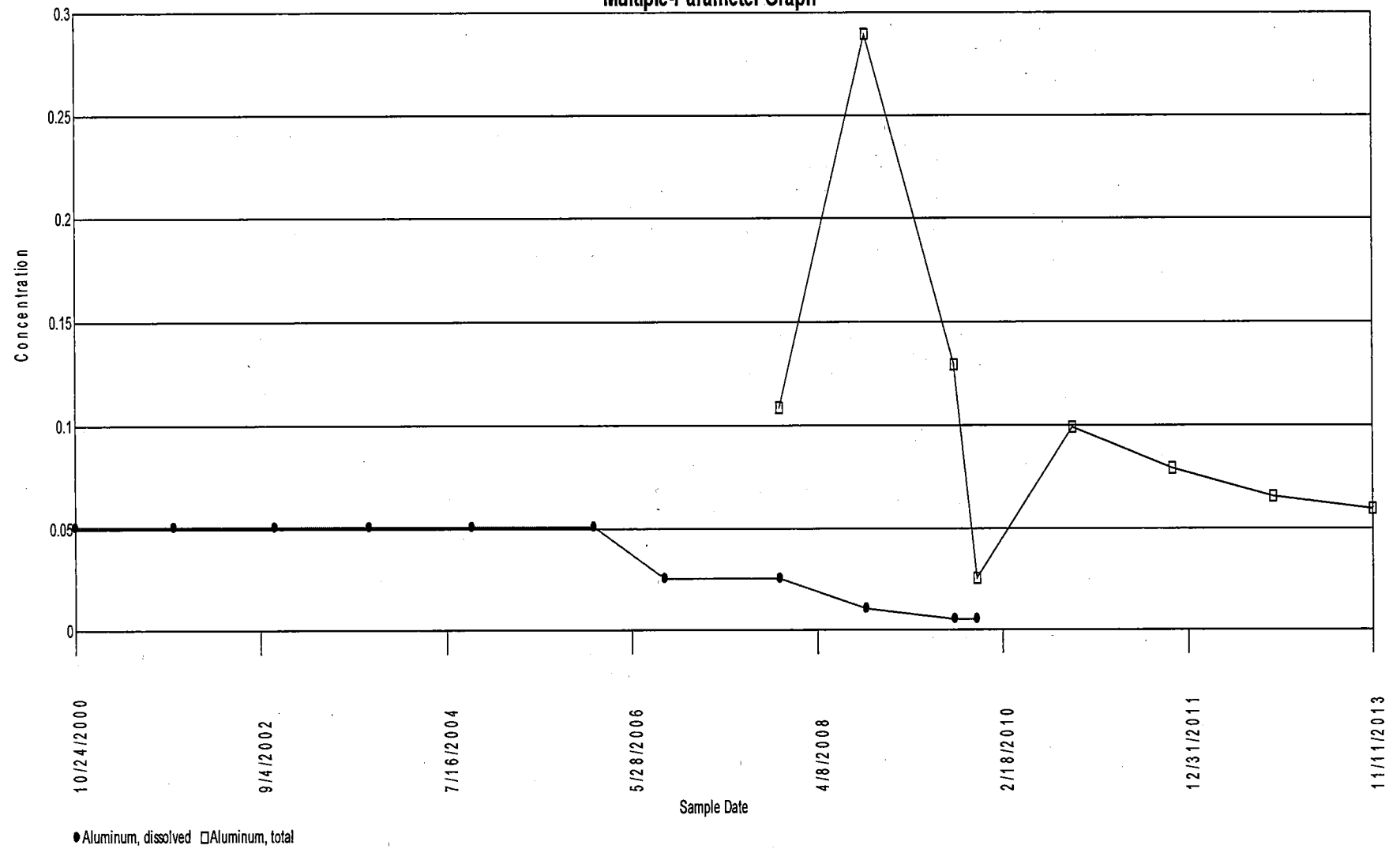
Multiple-Parameter Graph

MW07SG

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

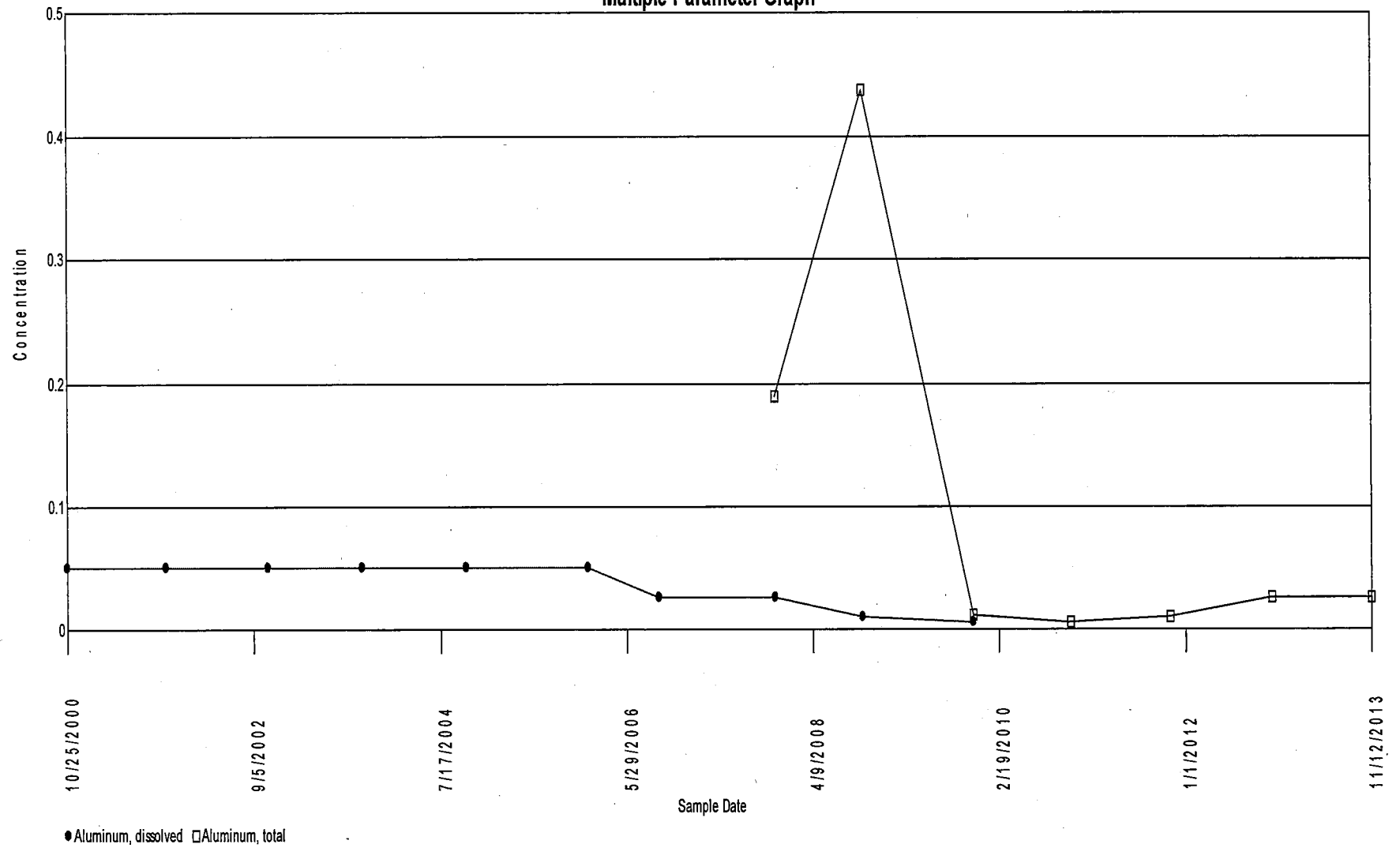
MW08SB
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW09DB

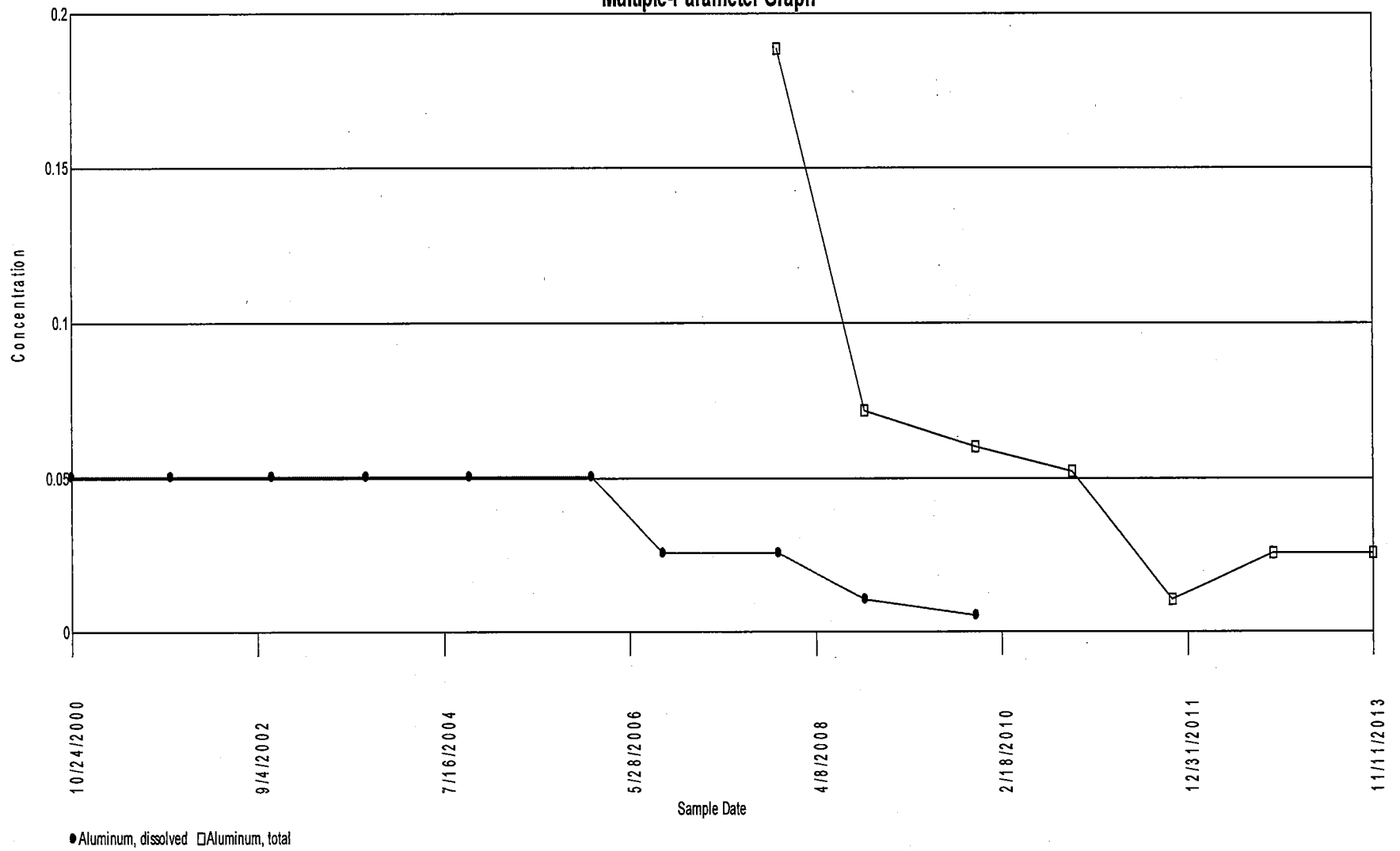
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW09SB

Multiple-Parameter Graph



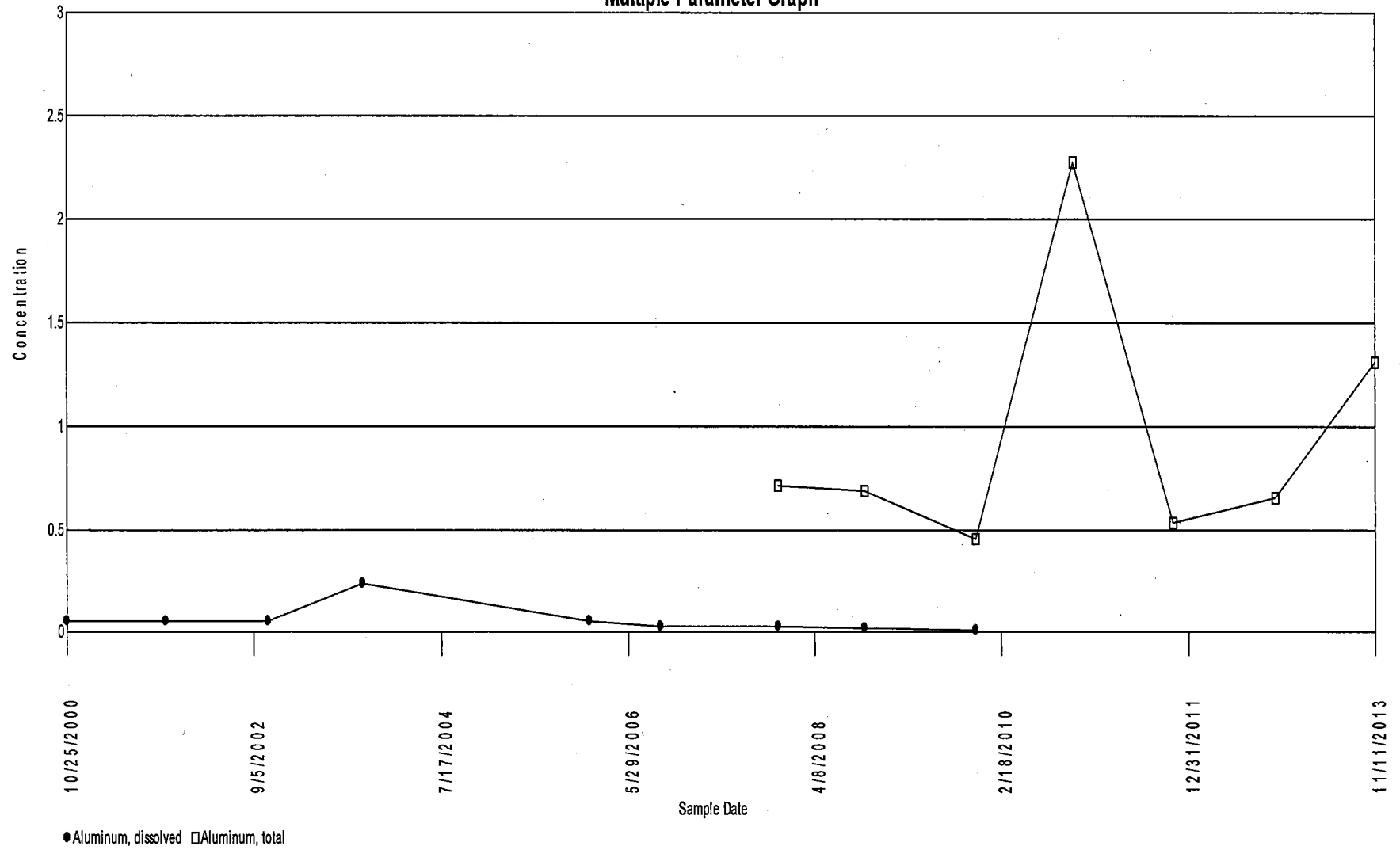
Multiple-Parameter Graph

MW09SB

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

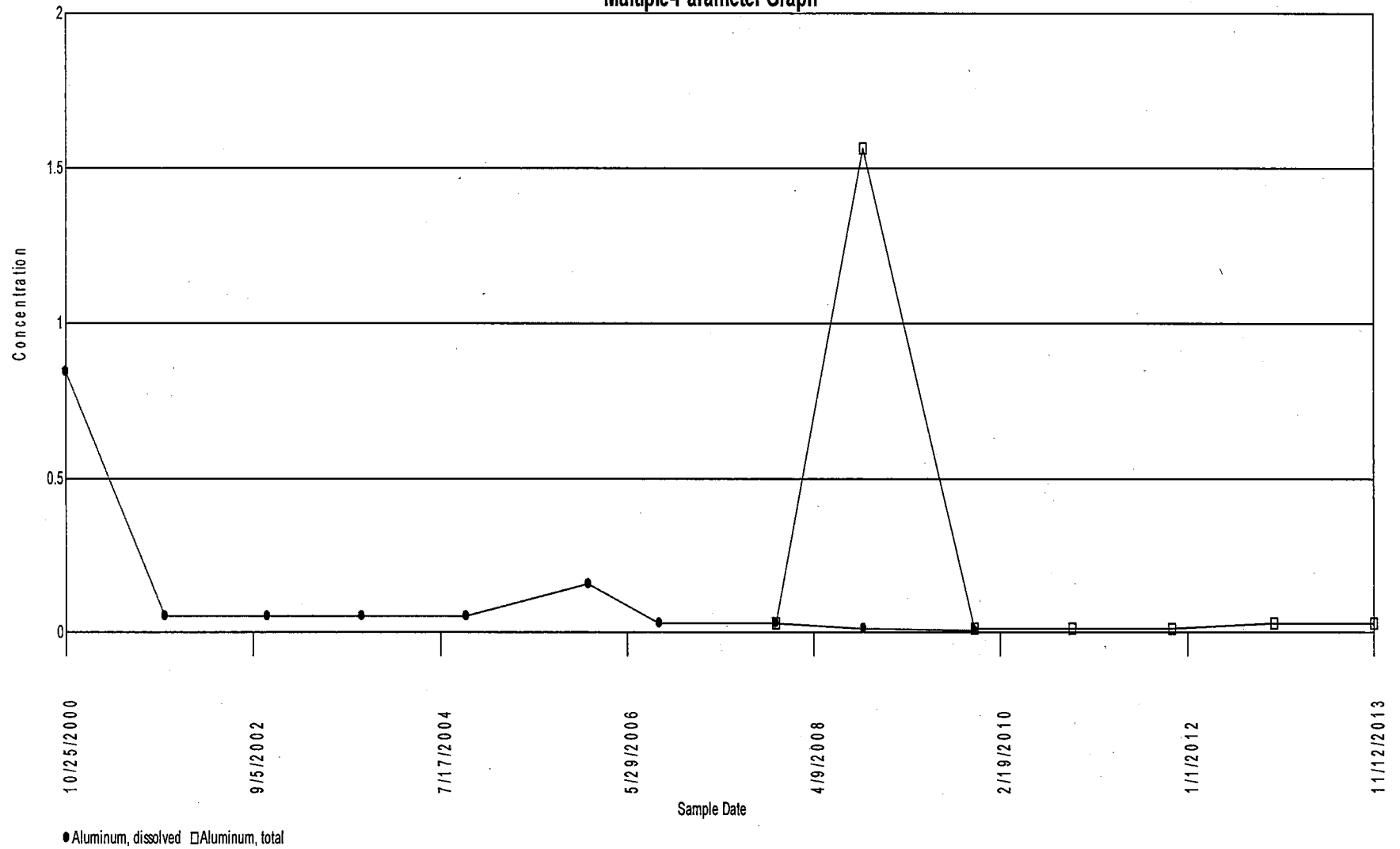
MW10SG
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

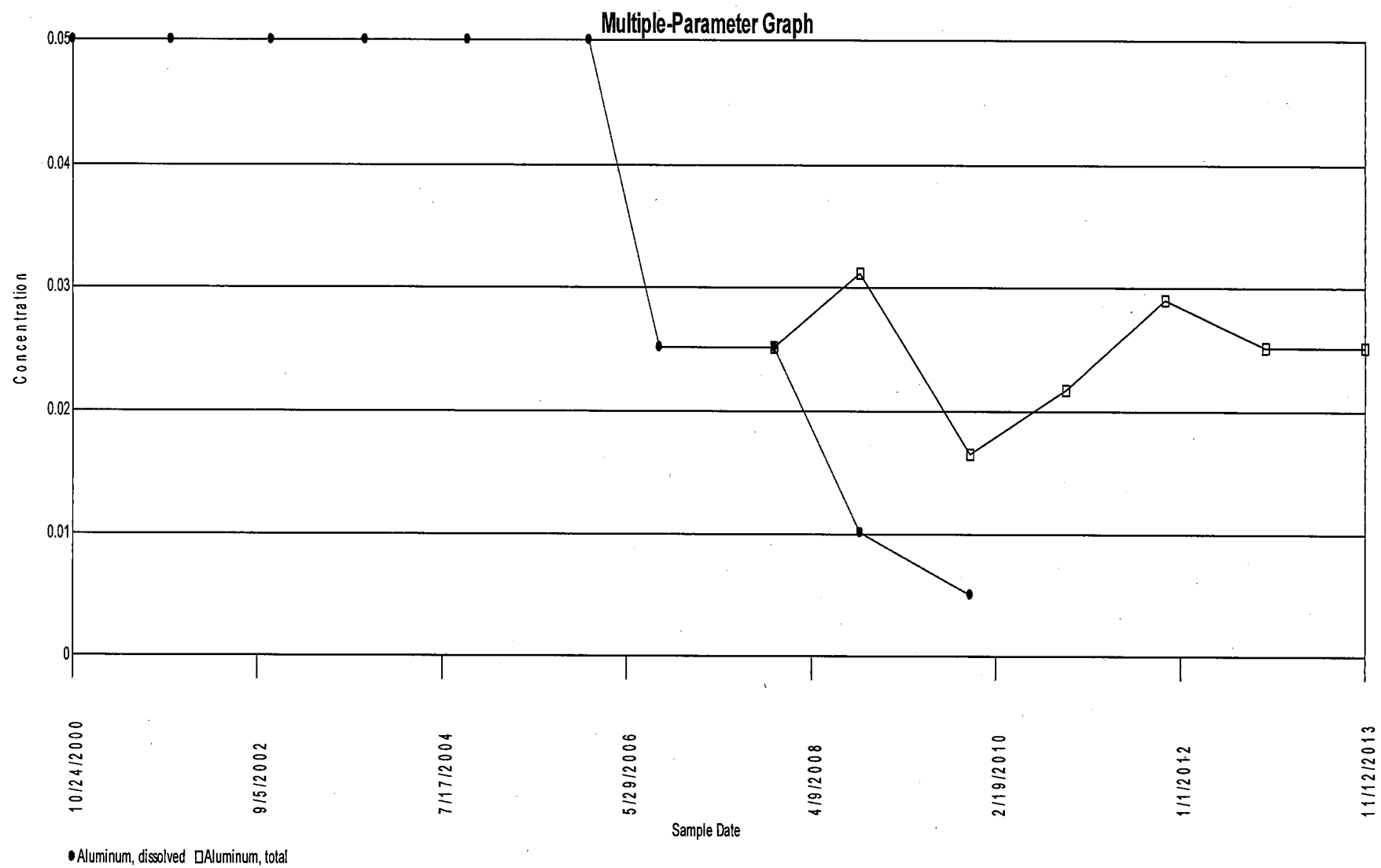
MW15SB

Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW16DB



Multiple-Parameter Graph

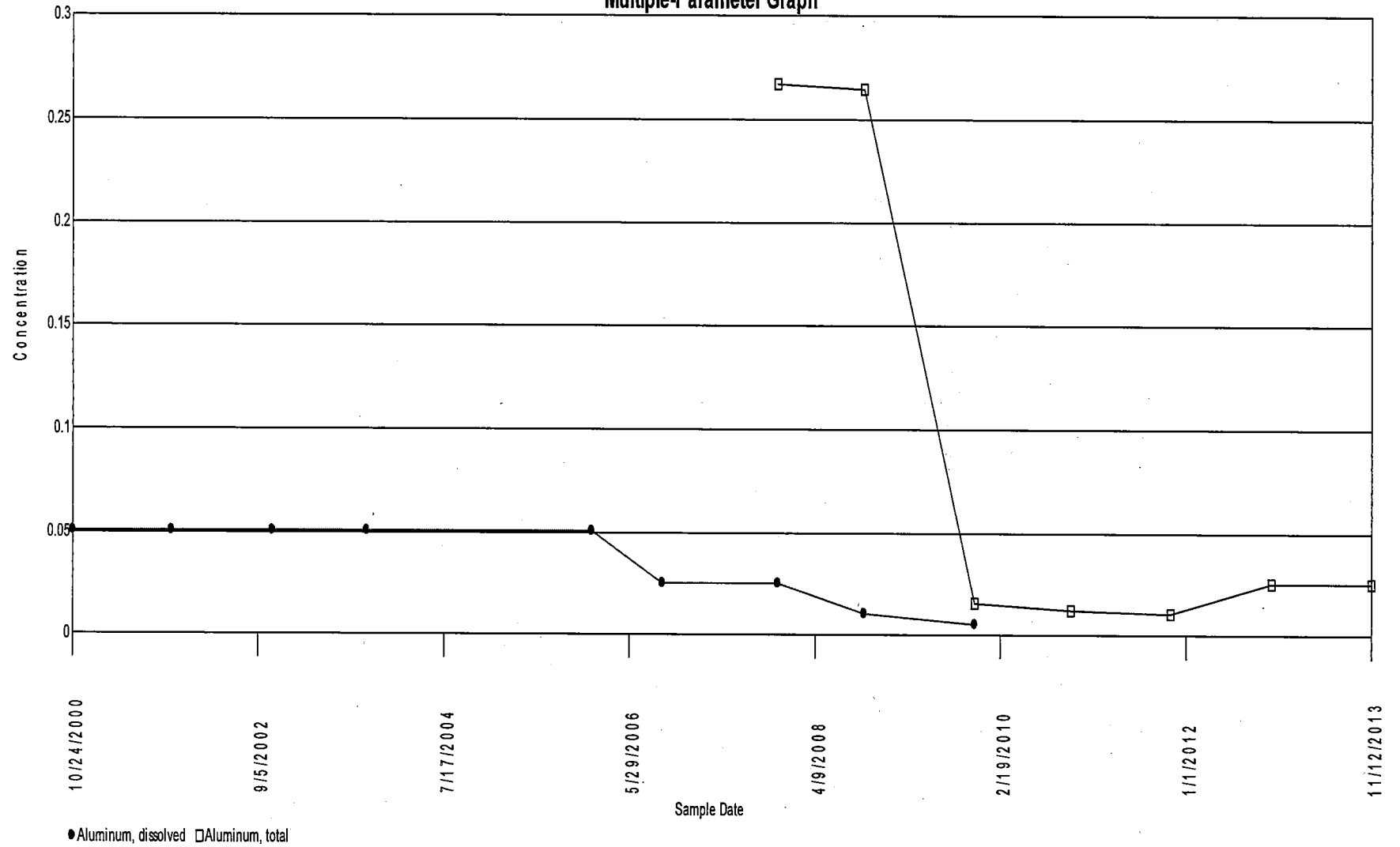
MW16DB

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

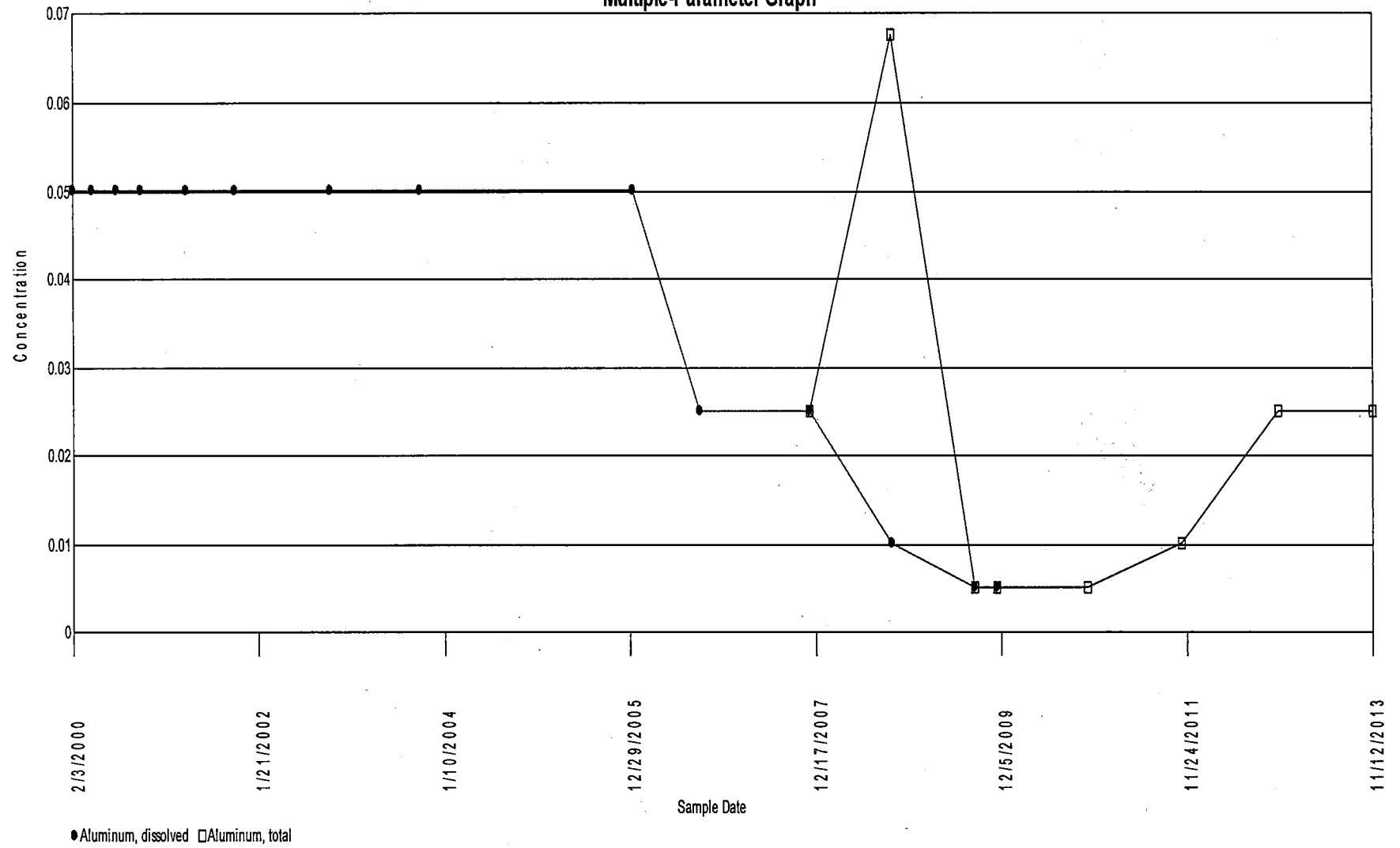
MW16SB

Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW17B (RW07)
Multiple-Parameter Graph



Multiple-Parameter Graph

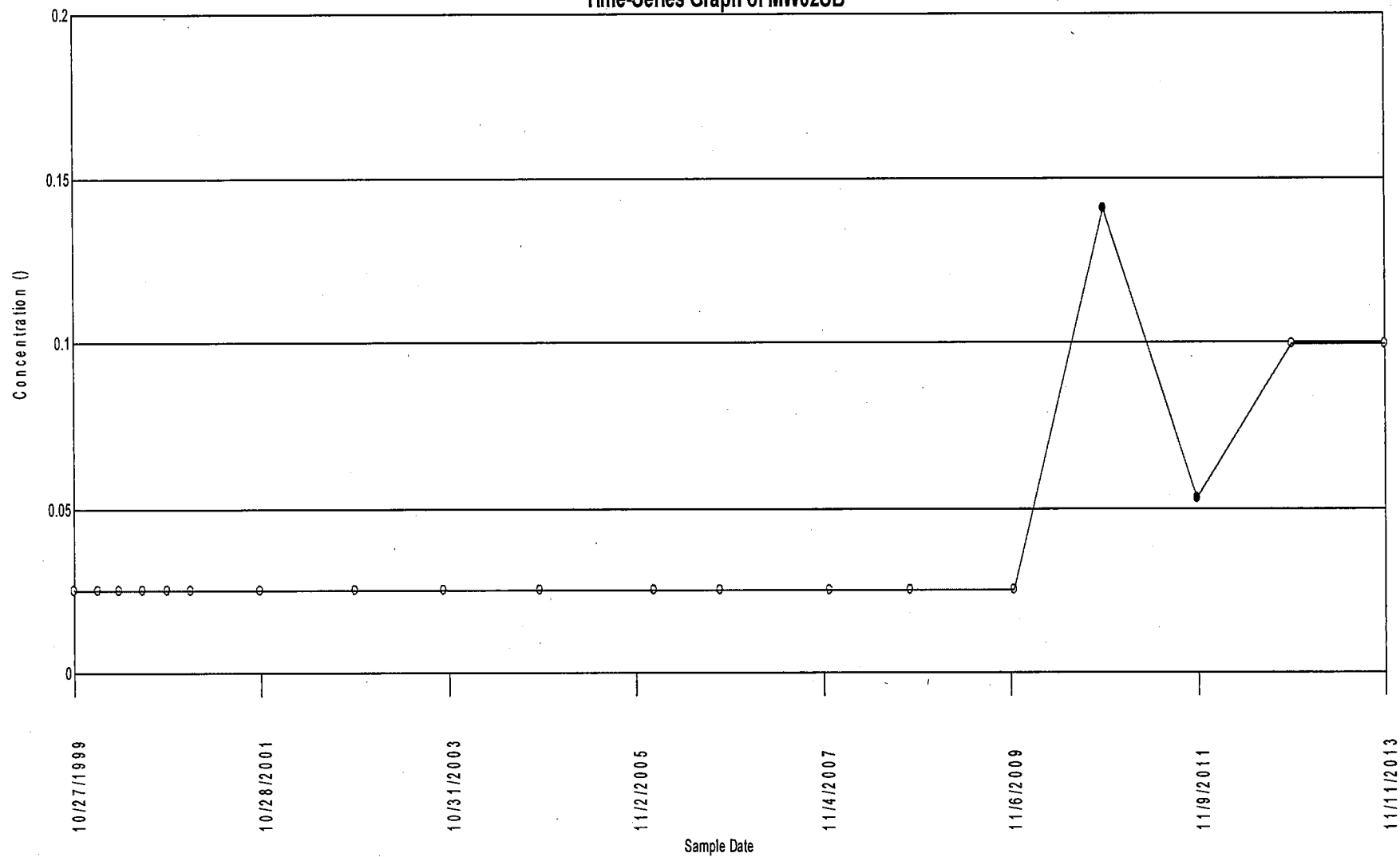
MW17B (RW07)

Multiple Parameters

AMMONIA NITROGEN

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen Time-Series Graph of MW02SB



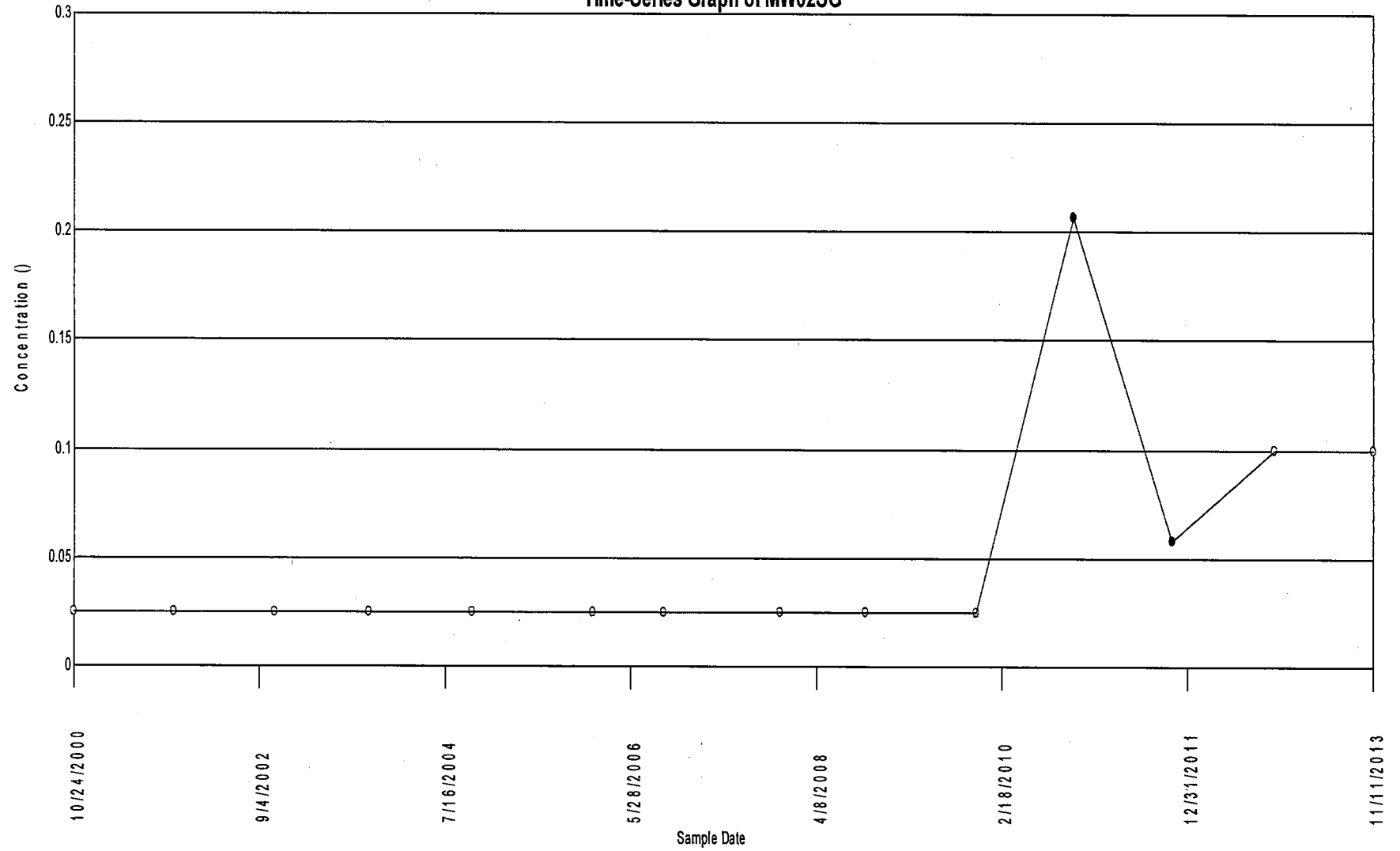
Time-Series Graph

MW02SB

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW02SG



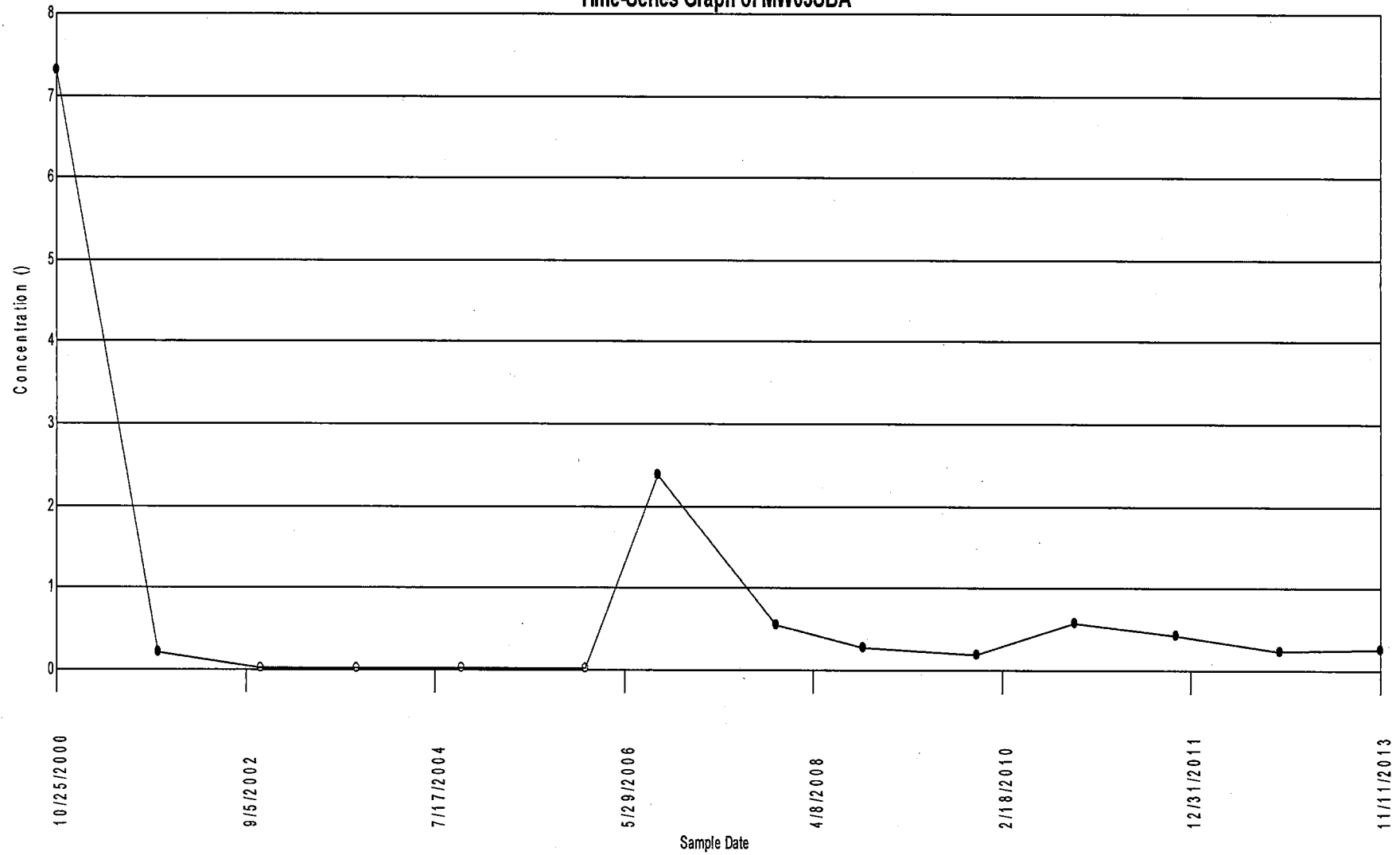
Time-Series Graph

MW02SG

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen Time-Series Graph of MW03SBA



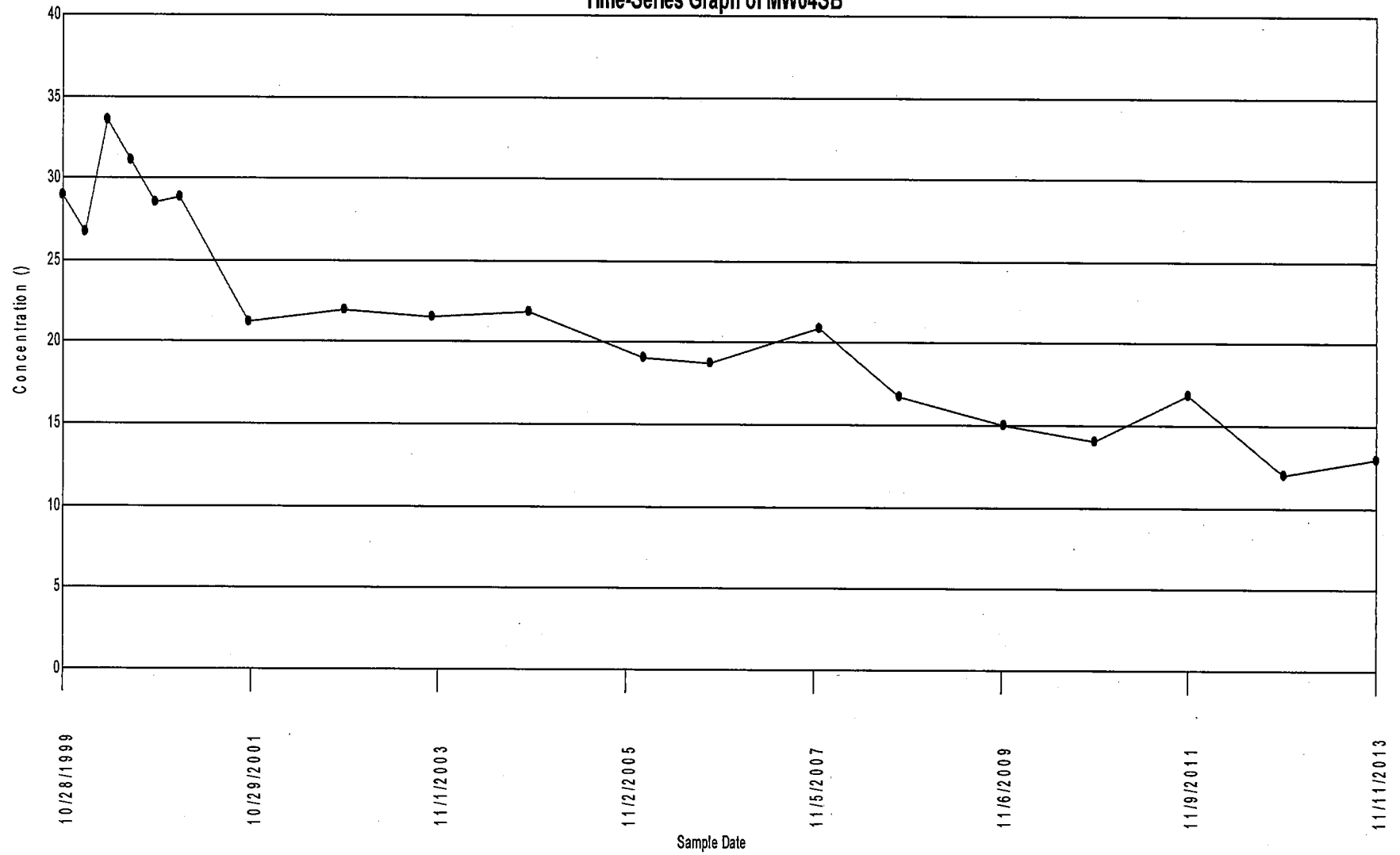
Time-Series Graph

MW03SBA

Ammonia Nitrogen

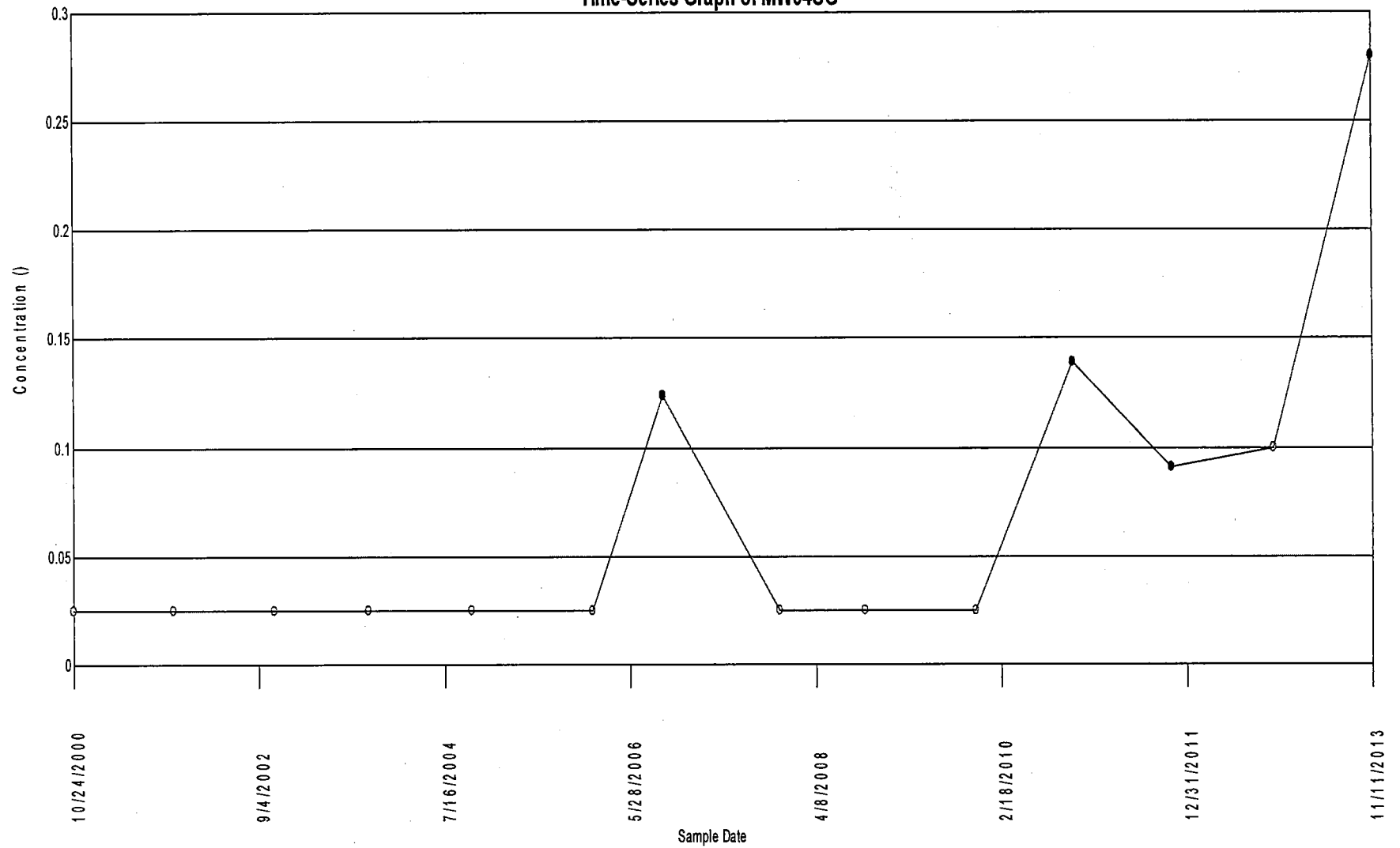
ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW04SB



ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen Time-Series Graph of MW04SG



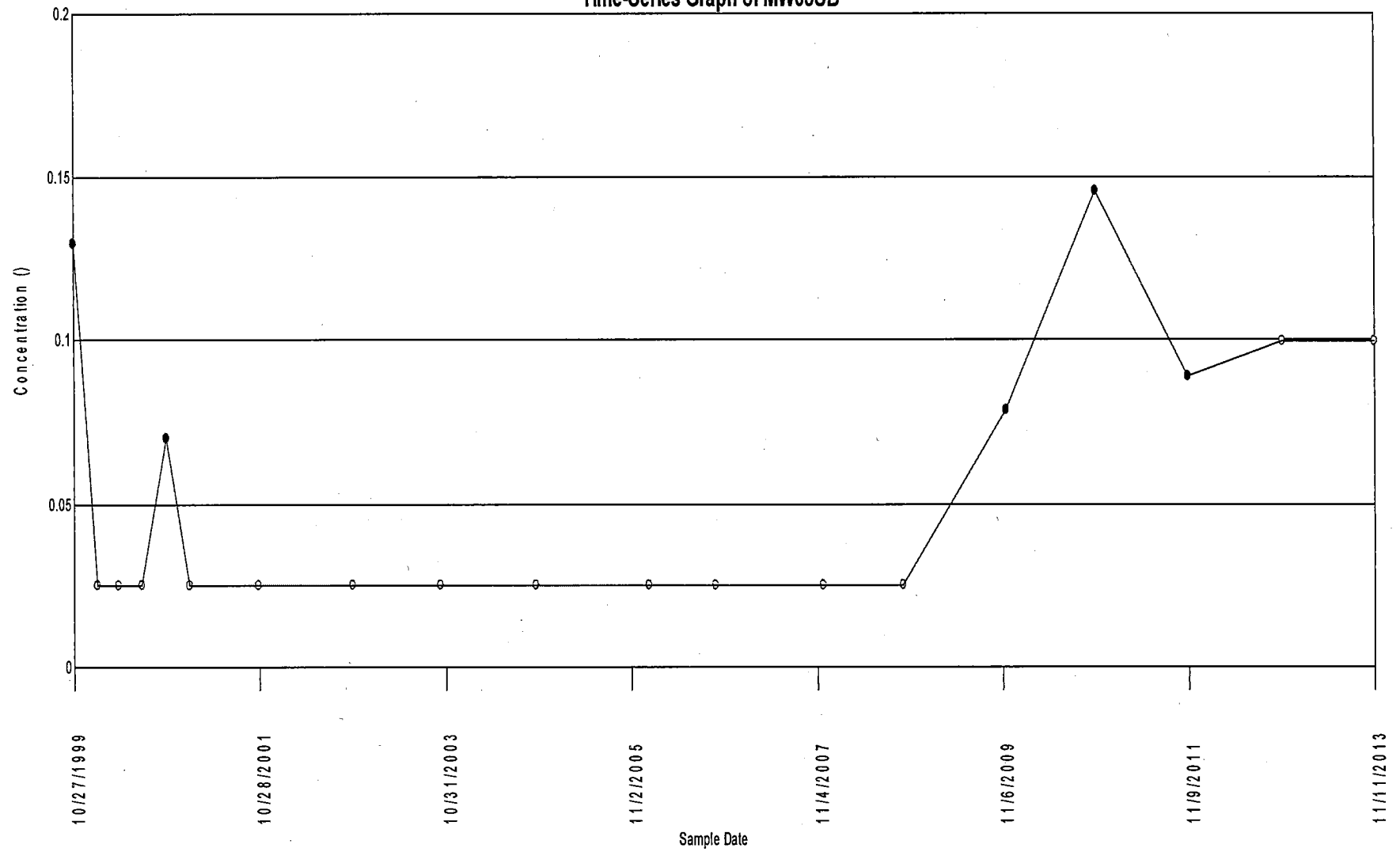
Time-Series Graph

MW04SG

Ammonia Nitrogen

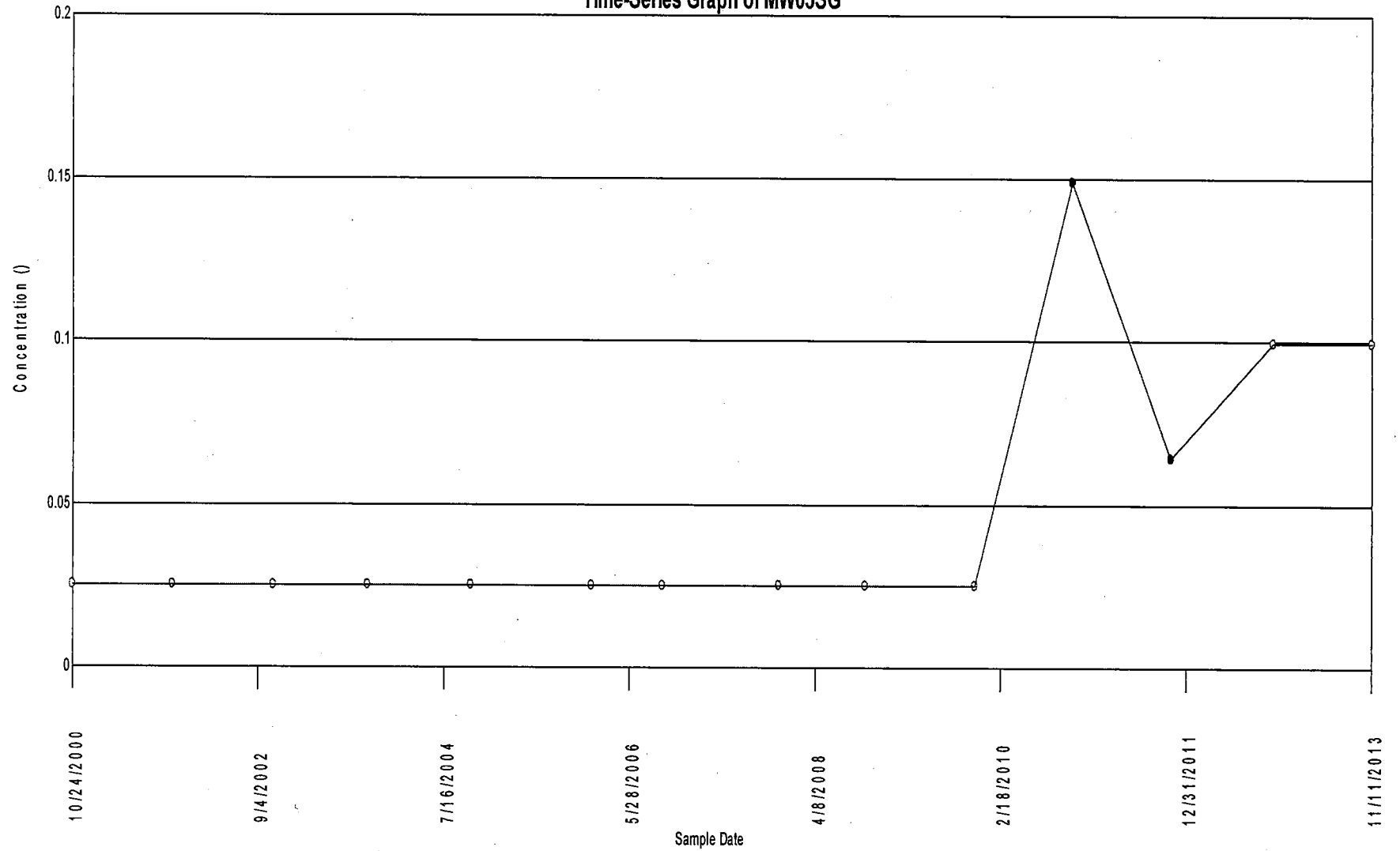
ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW05SB



ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW05SG



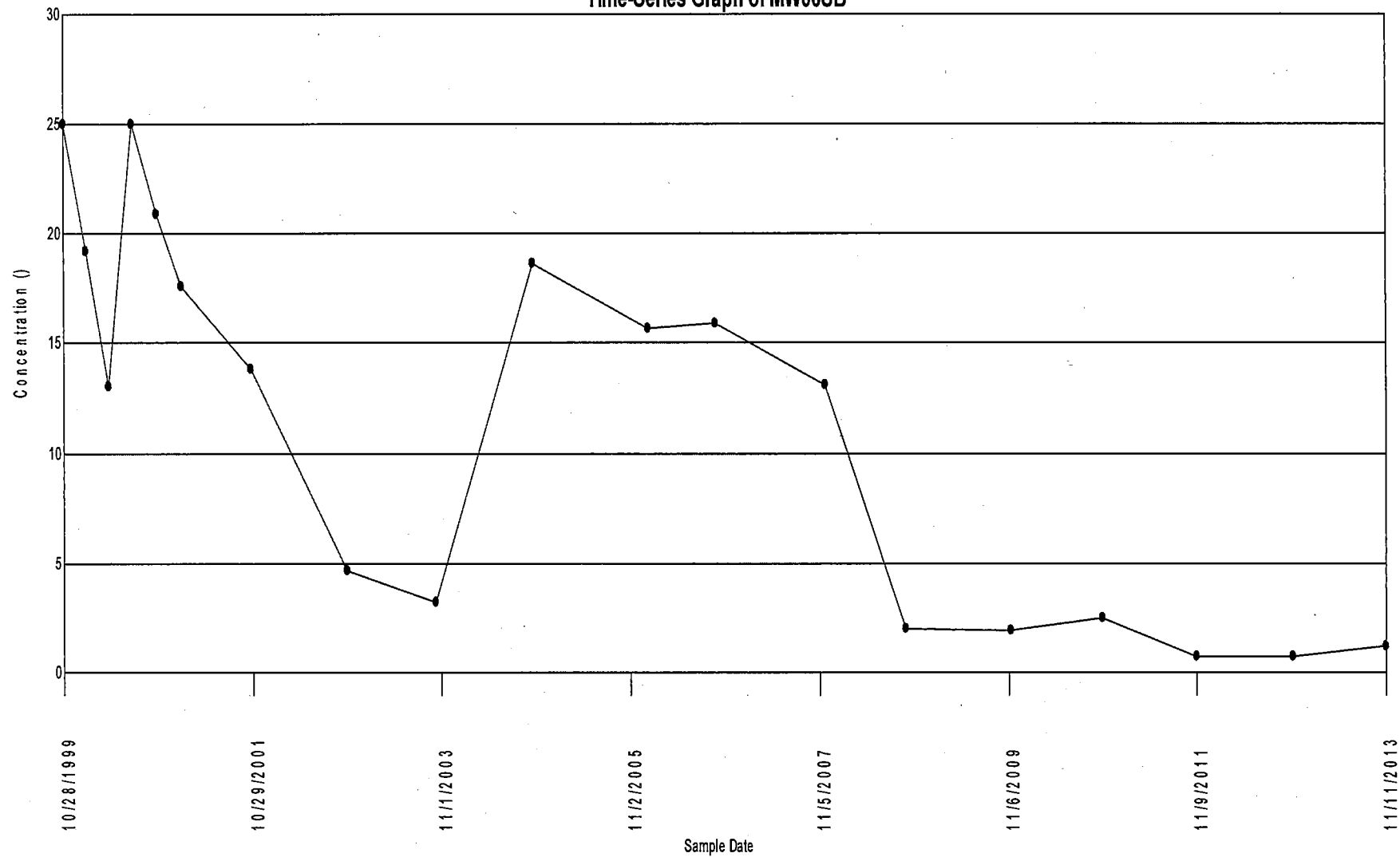
Time-Series Graph

MW05SG

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen Time-Series Graph of MW06SB



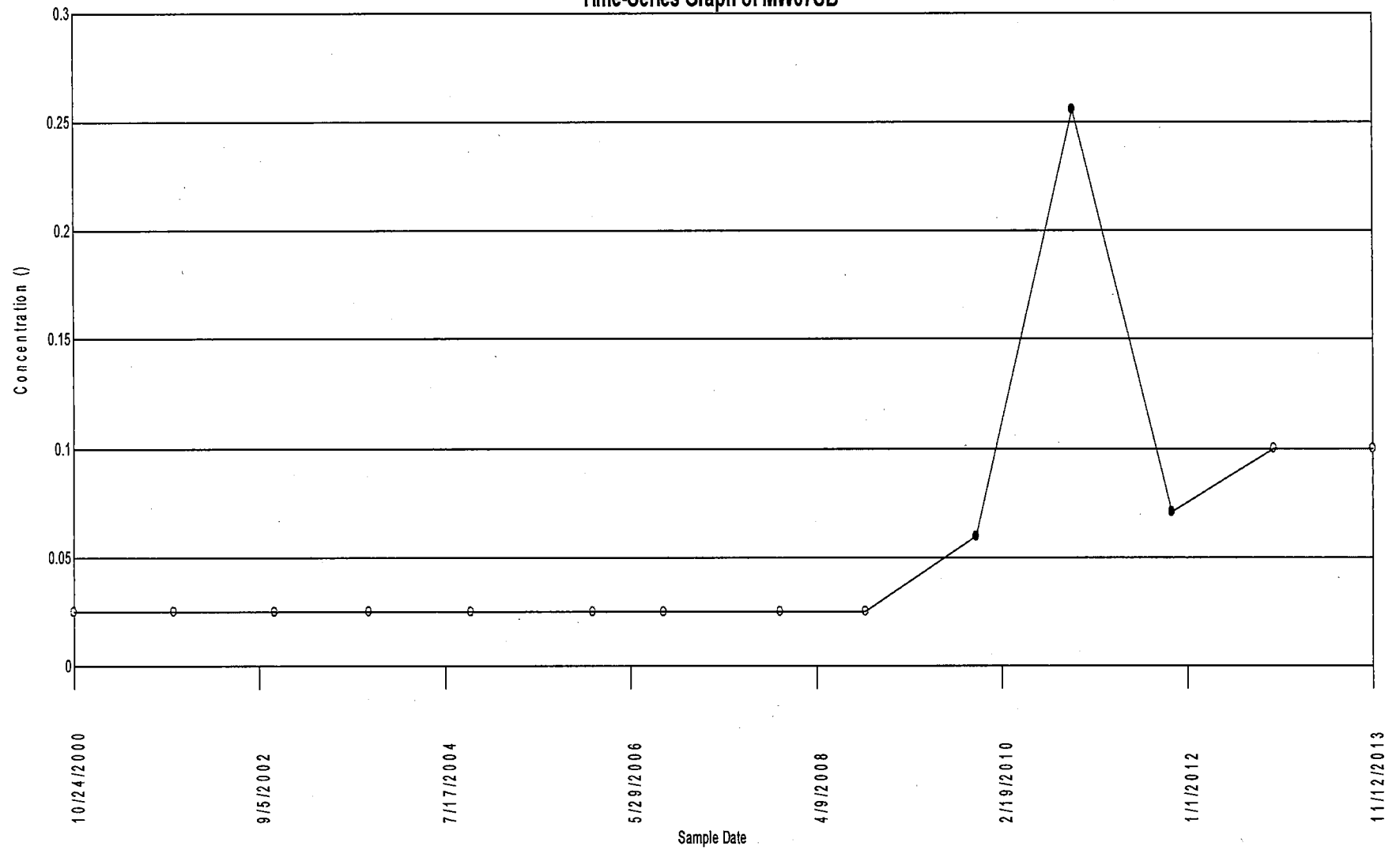
Time-Series Graph

MW06SB

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW07SB



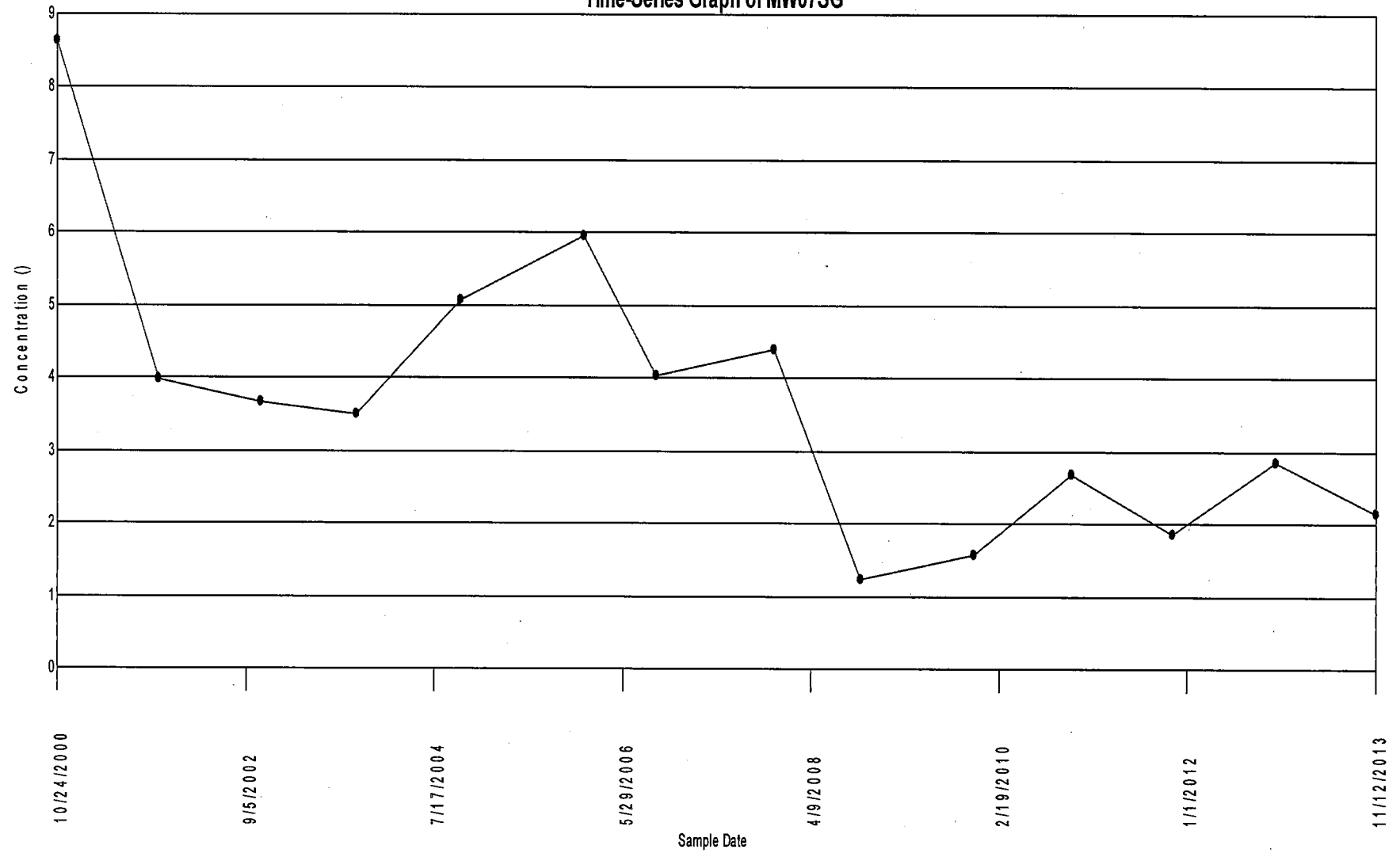
Time-Series Graph

MW07SB

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW07SG



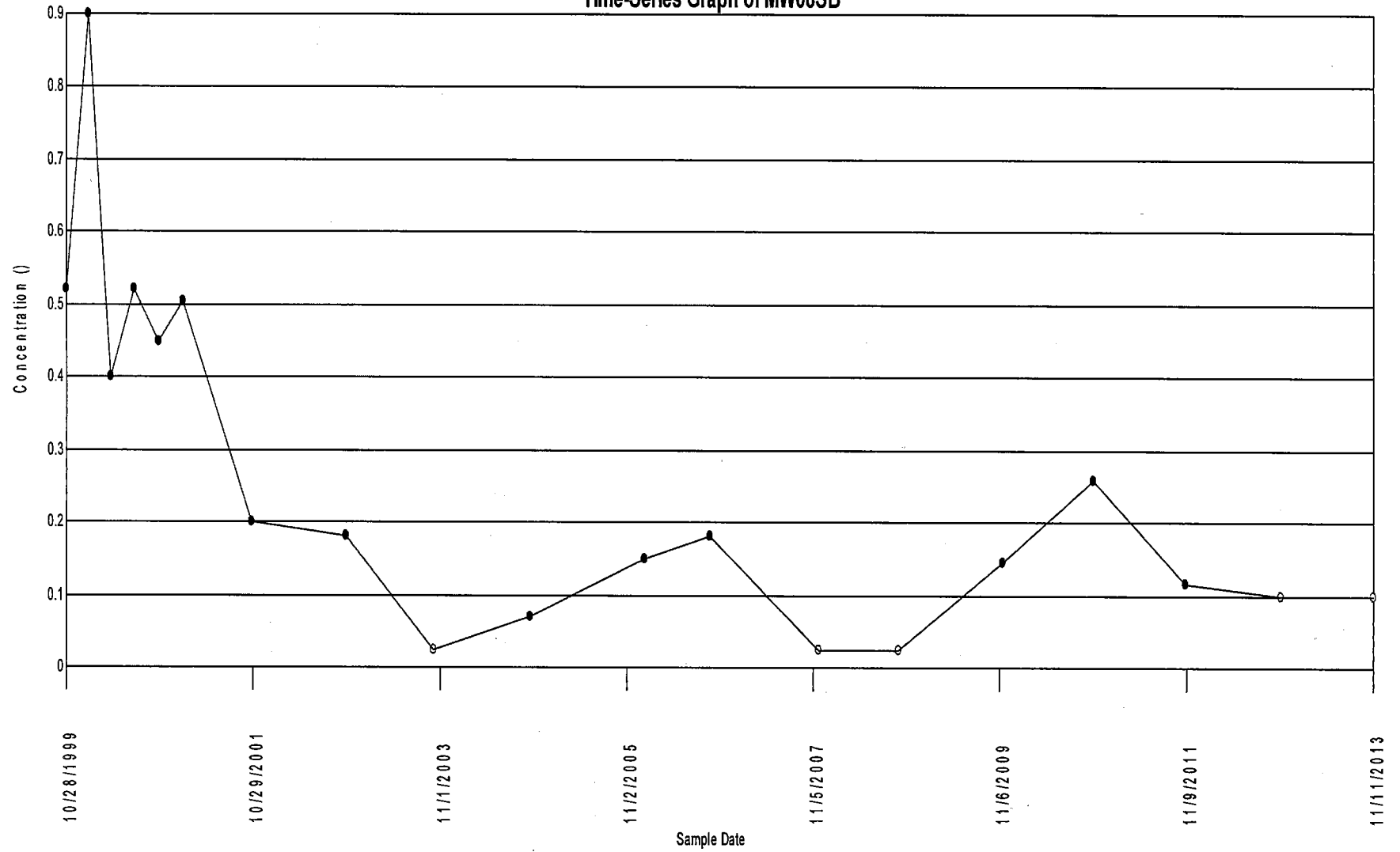
Time-Series Graph

MW07SG

Ammonia Nitrogen

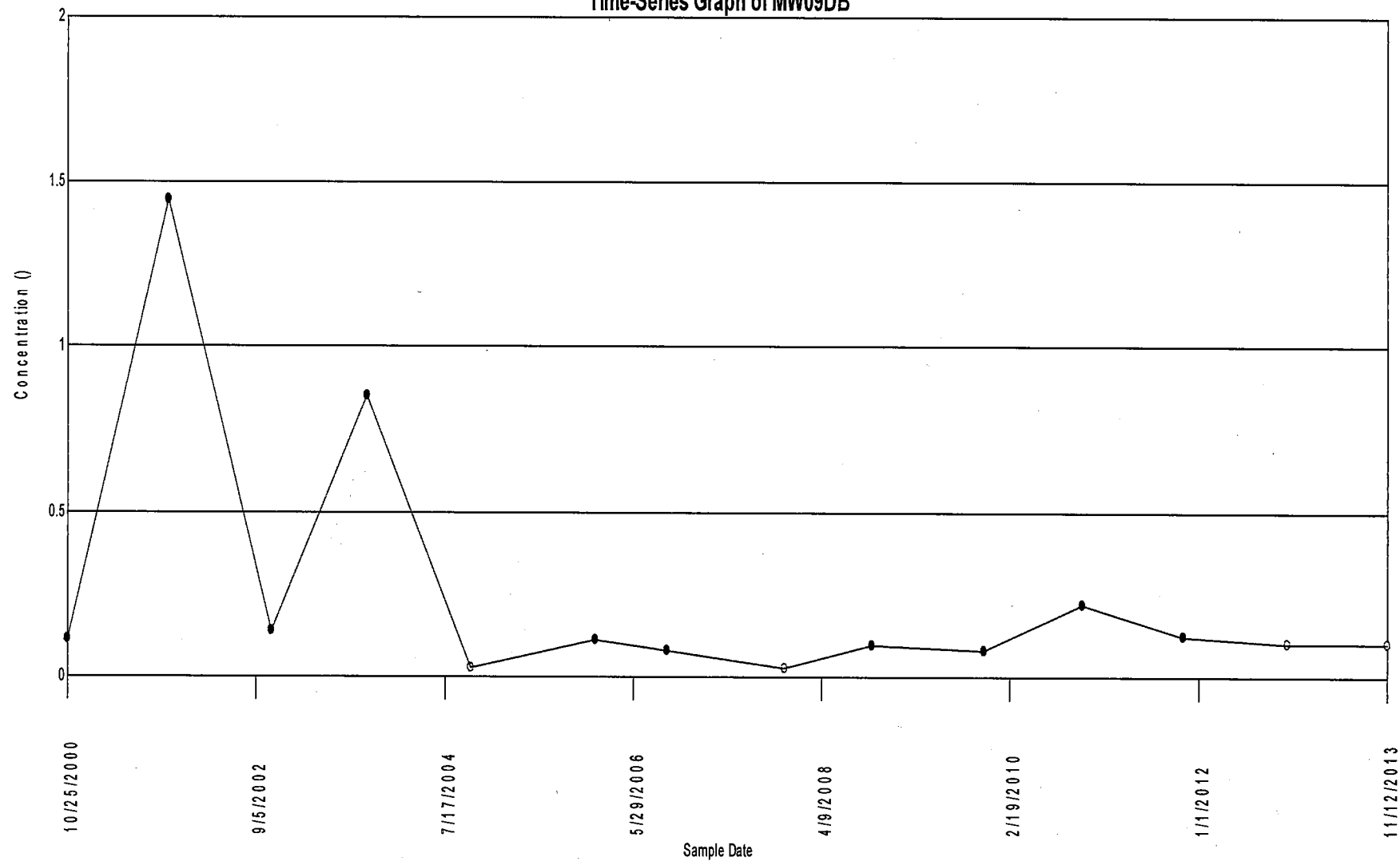
ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW08SB



ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW09DB



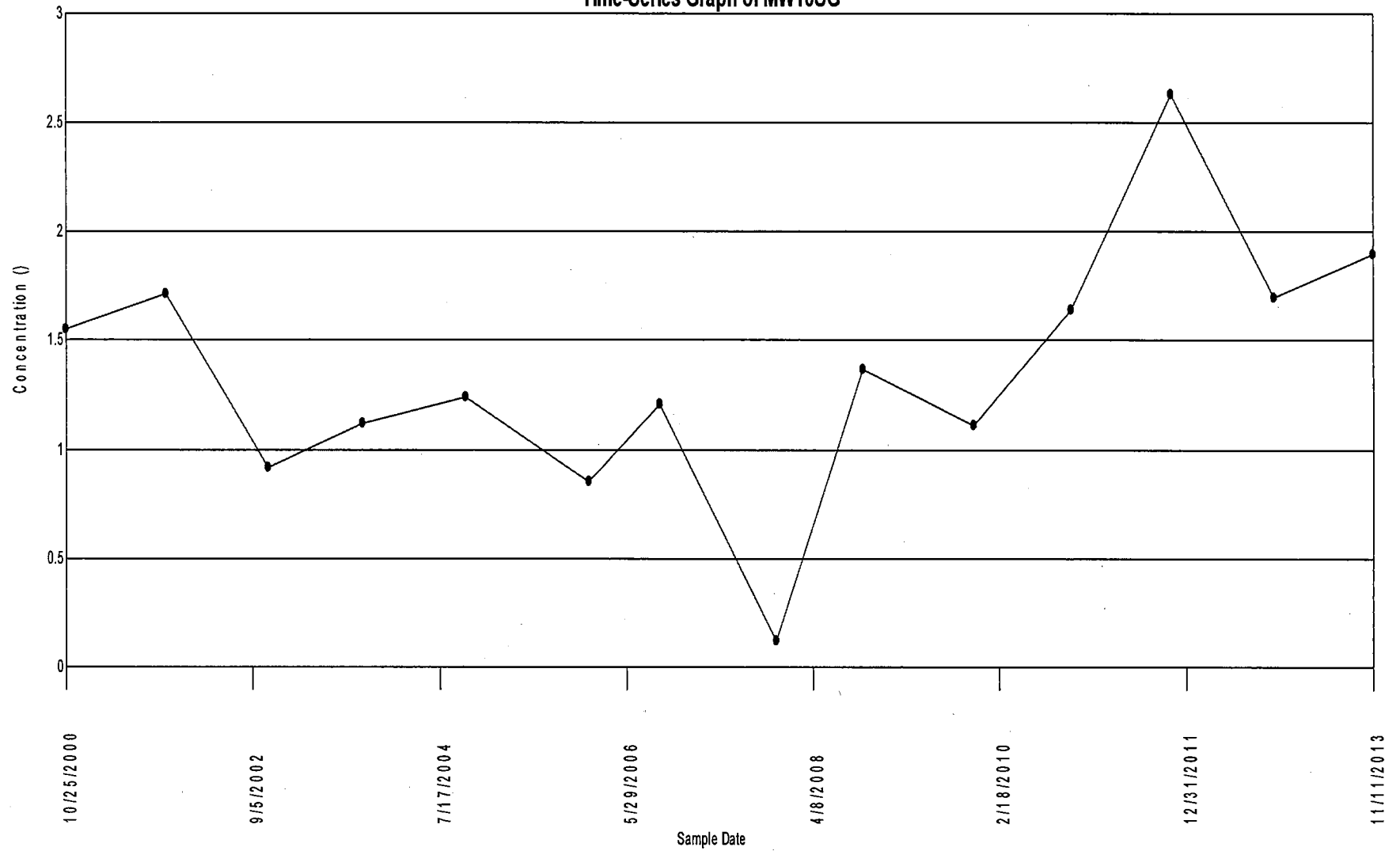
Ammonia Nitrogen

Time-Series Graph of MW09SB



ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW10SG



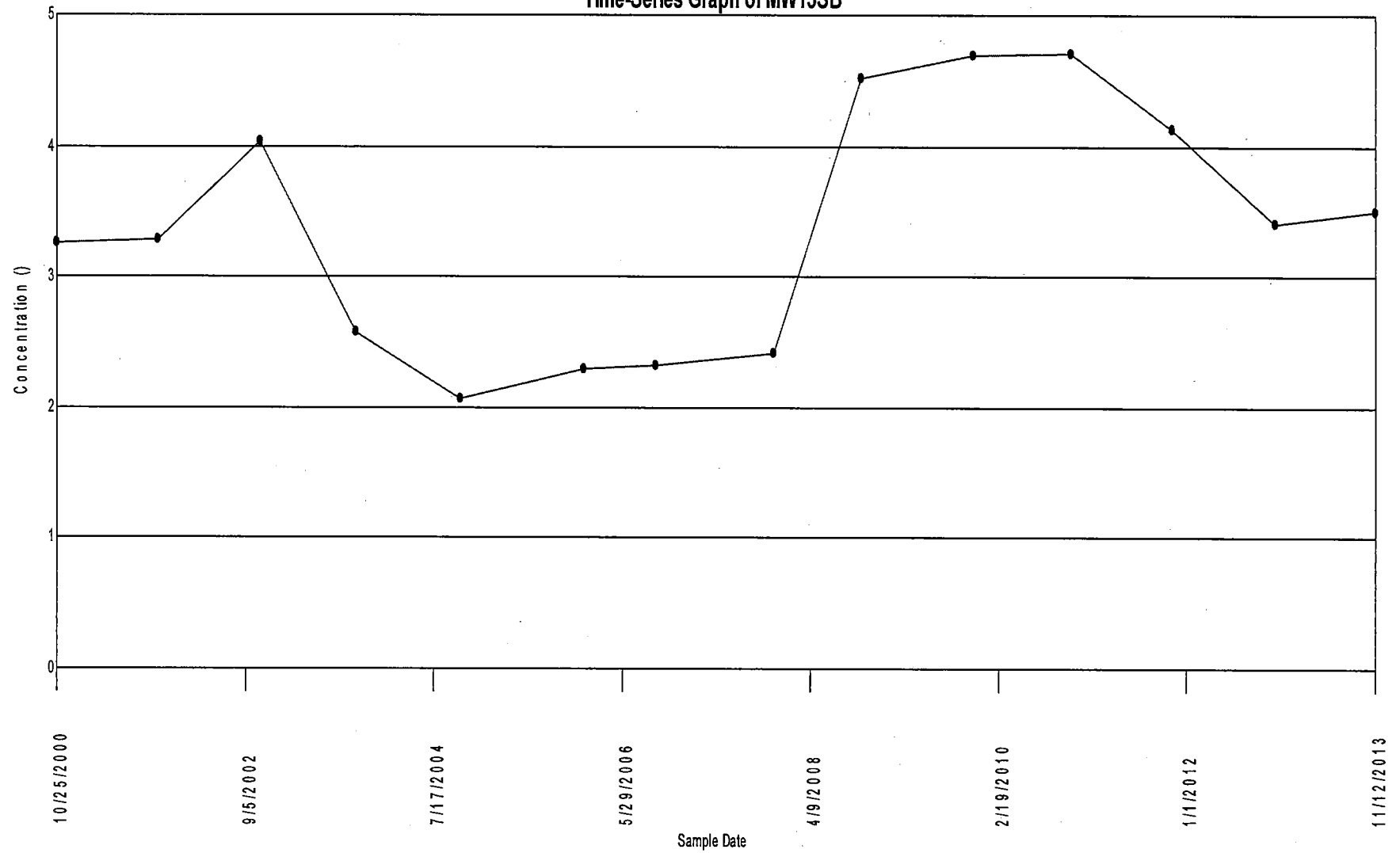
Time-Series Graph

MW10SG

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen Time-Series Graph of MW15SB



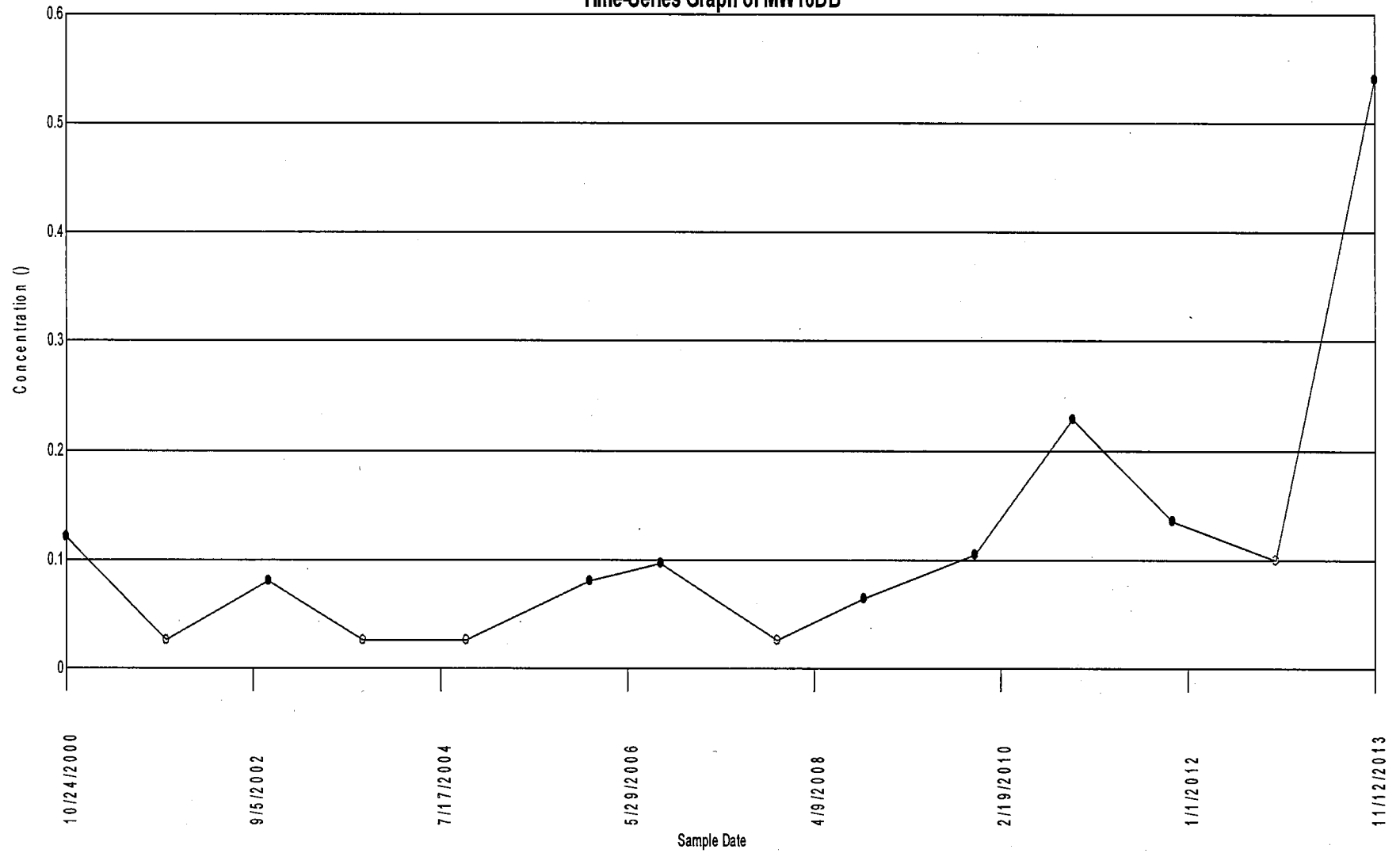
Time-Series Graph

MW15SB

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW16DB



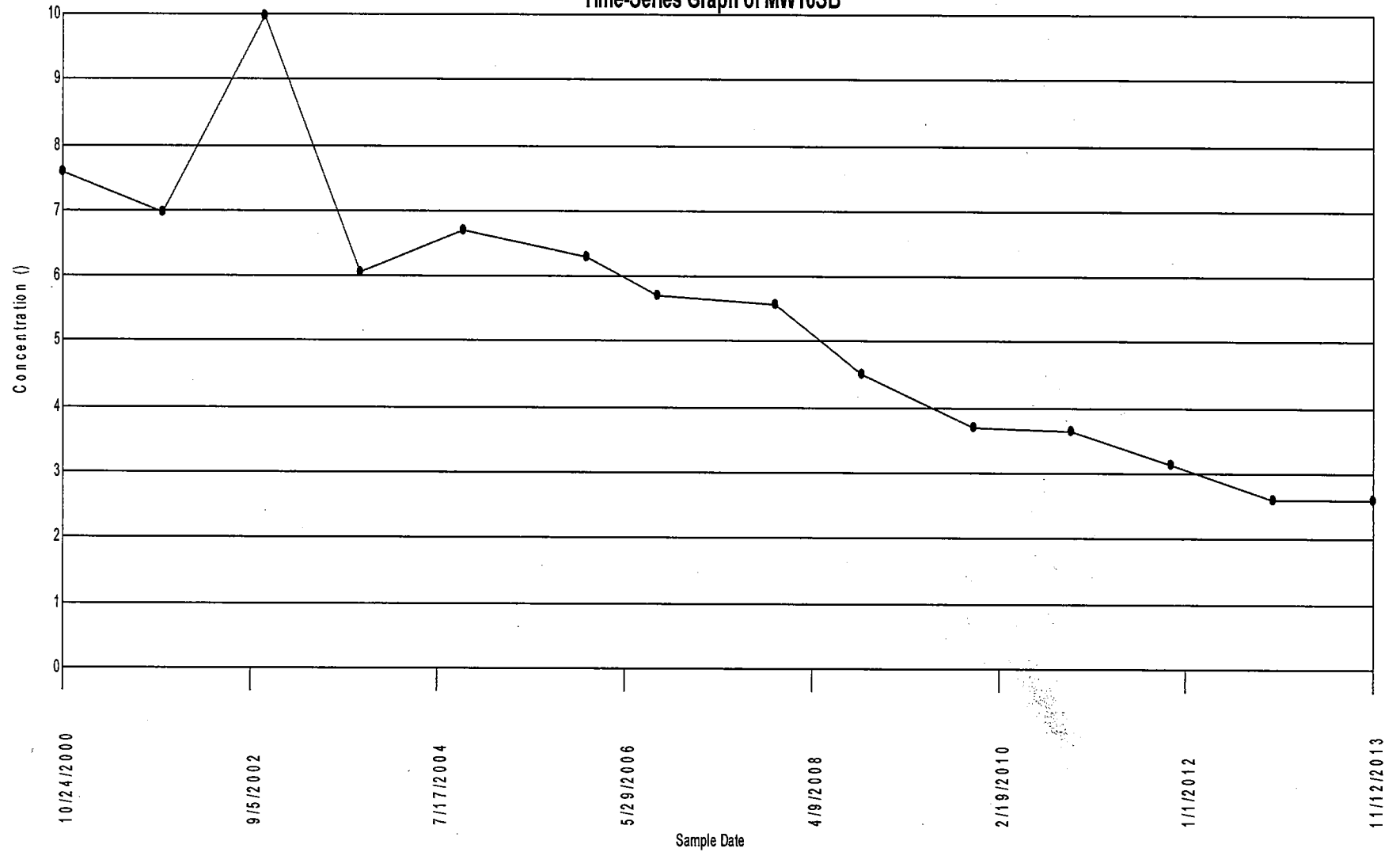
Time-Series Graph

MW16DB

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW16SB



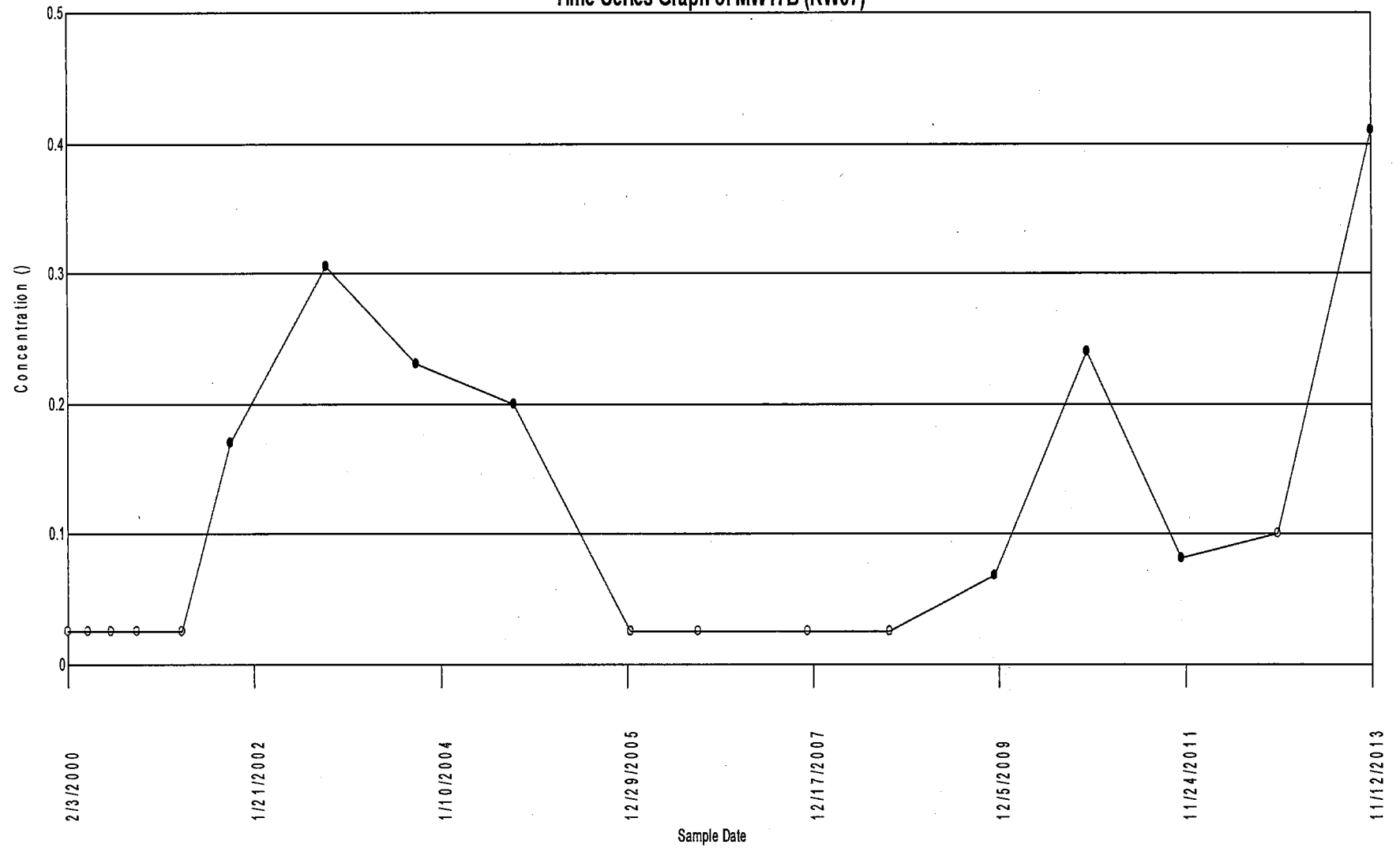
Time-Series Graph

MW16SB

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen
Time-Series Graph of MW17B (RW07)



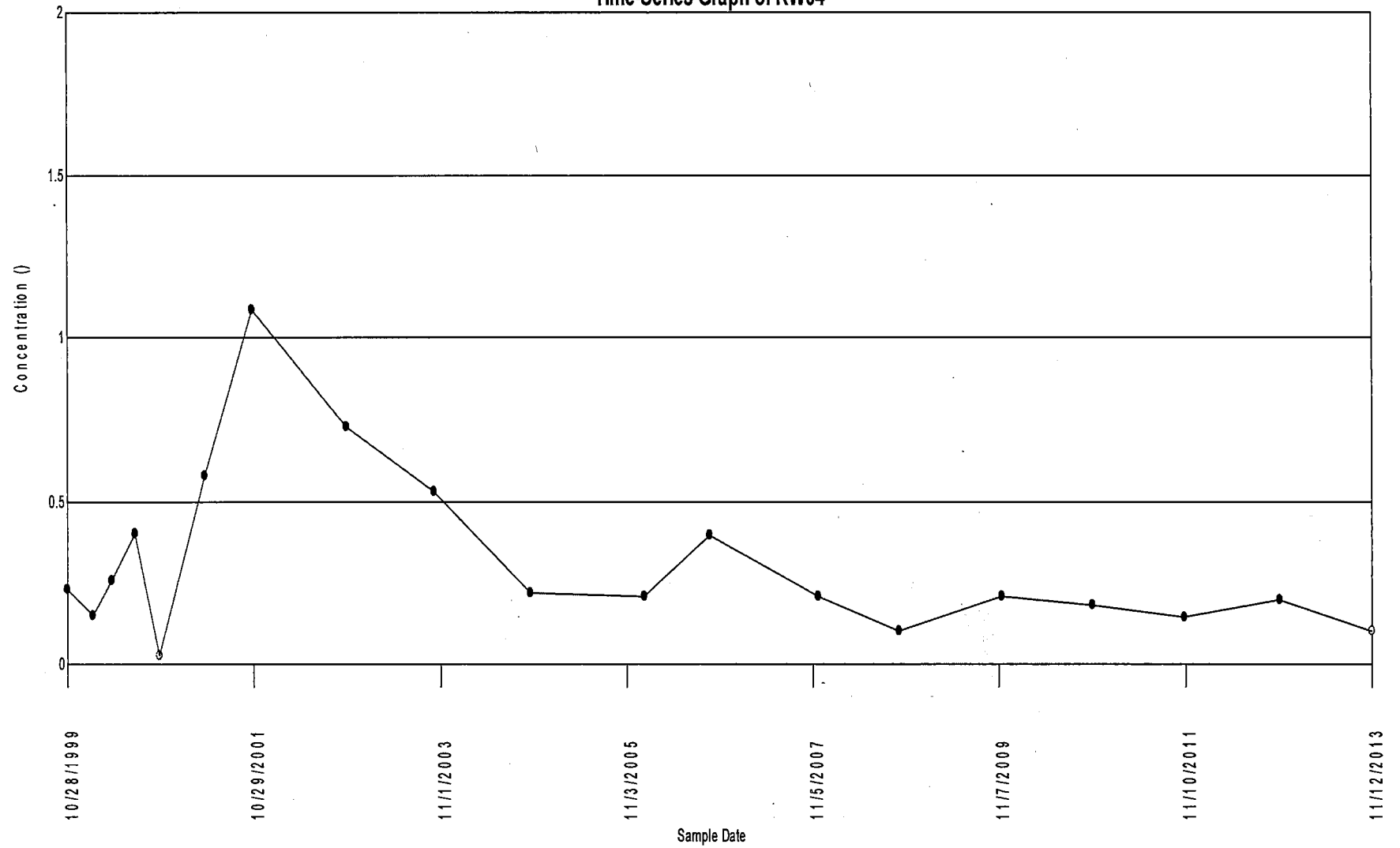
Time-Series Graph

MW17B (RW07)

Ammonia Nitrogen

ALBION-SHERIDAN TOWNSHIP LANDFILL

Ammonia Nitrogen Time-Series Graph of RW04

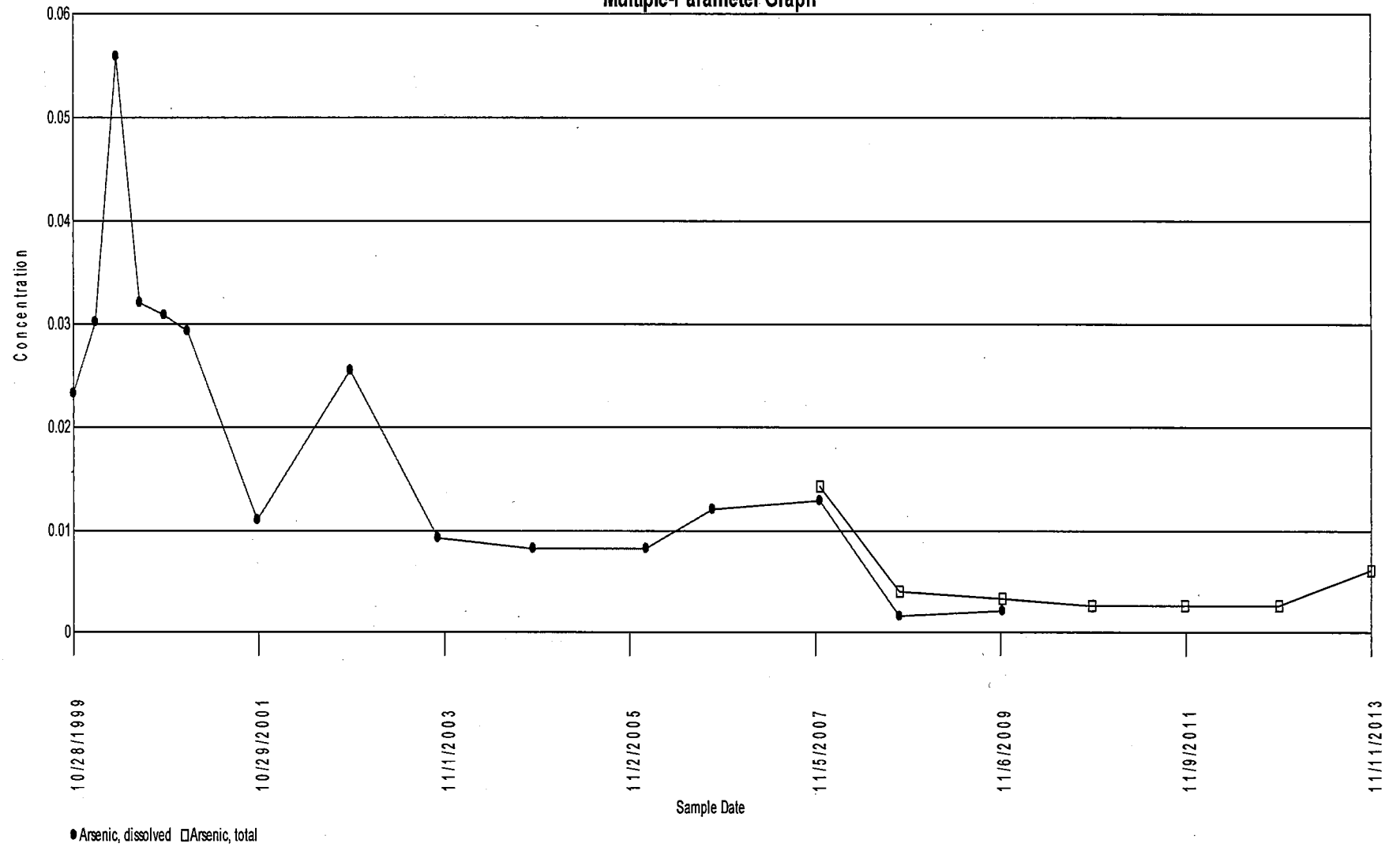


ARSENIC

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW04SB

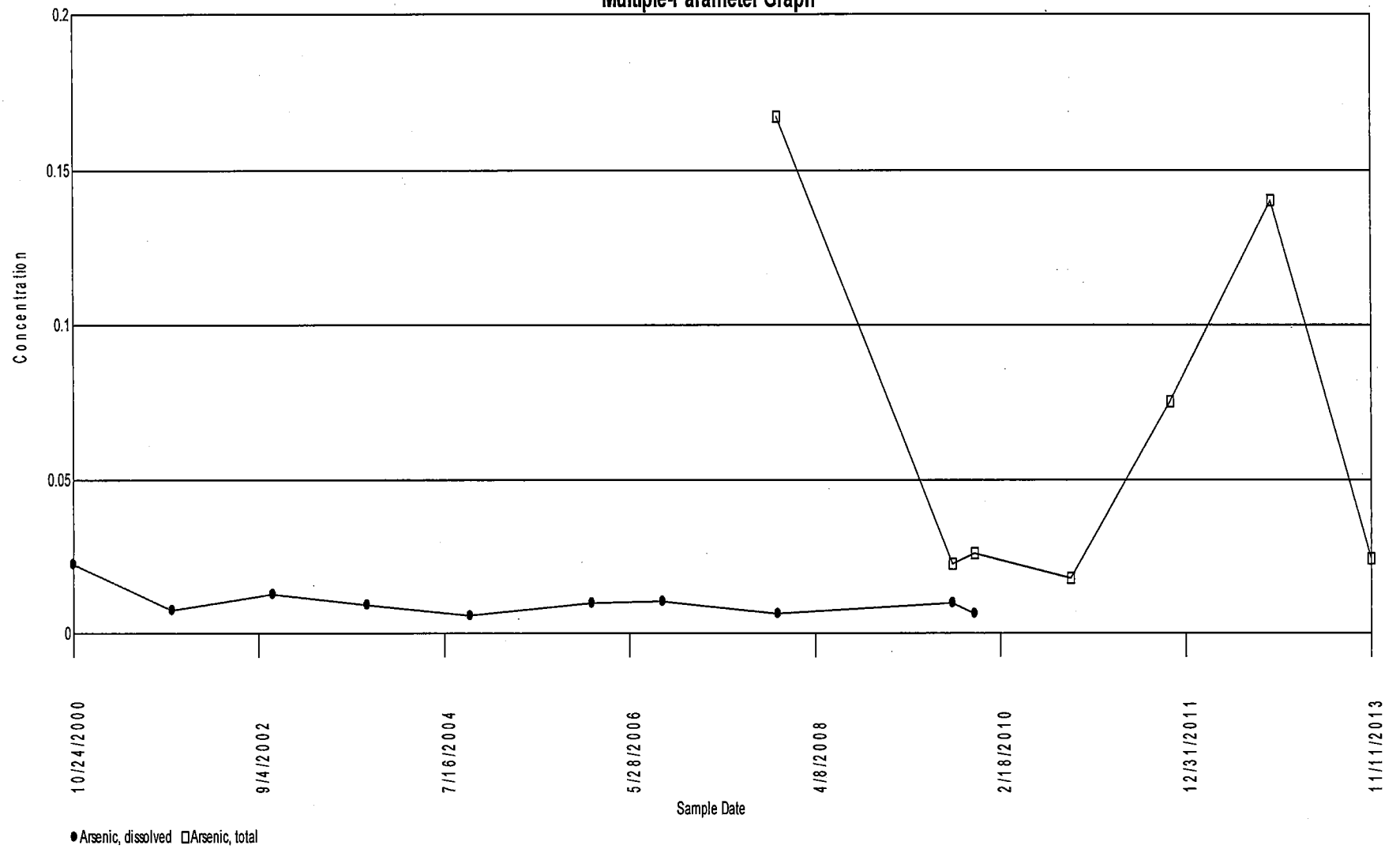
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW04SG

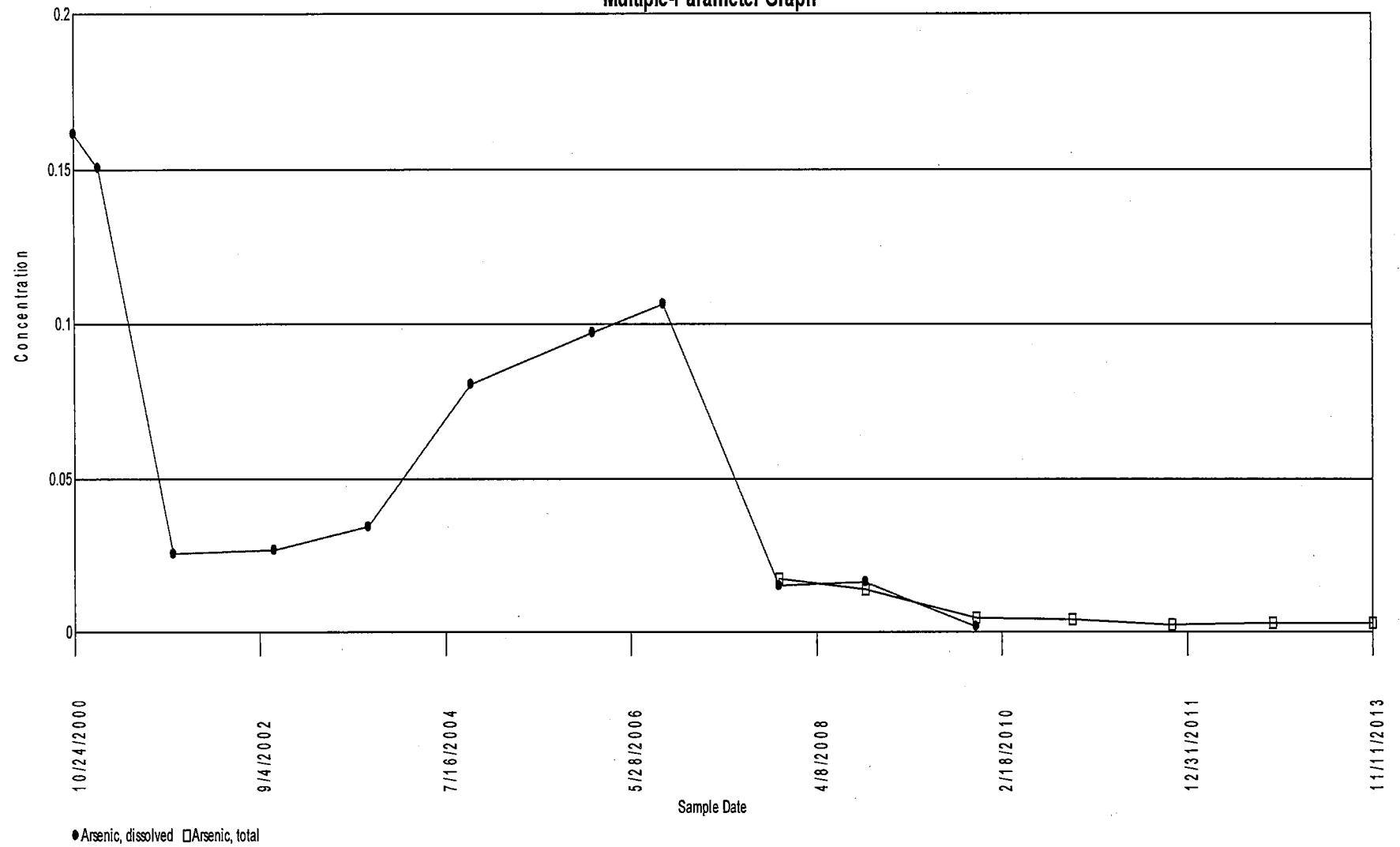
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW06SB

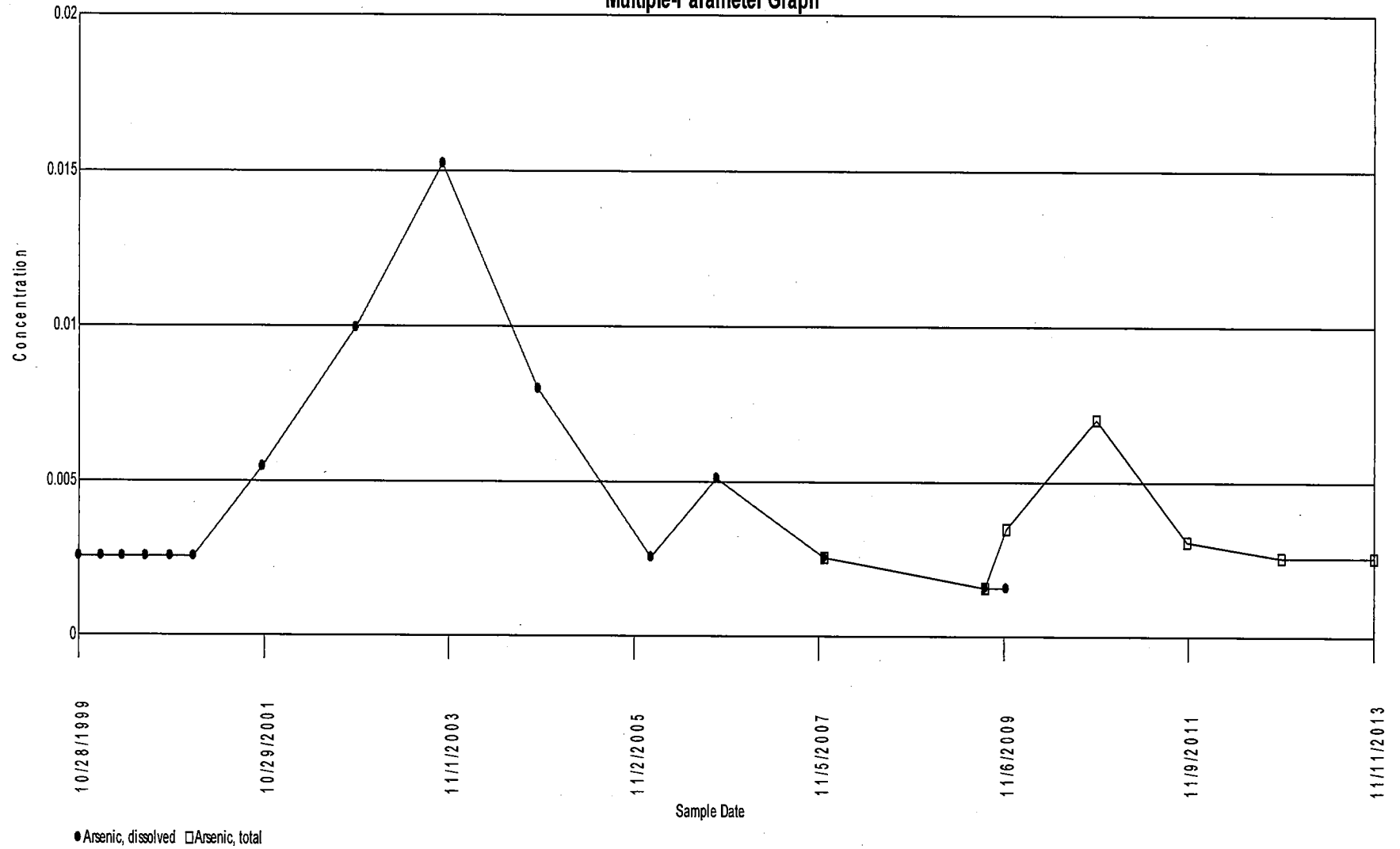
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW08SB

Multiple-Parameter Graph



Multiple-Parameter Graph

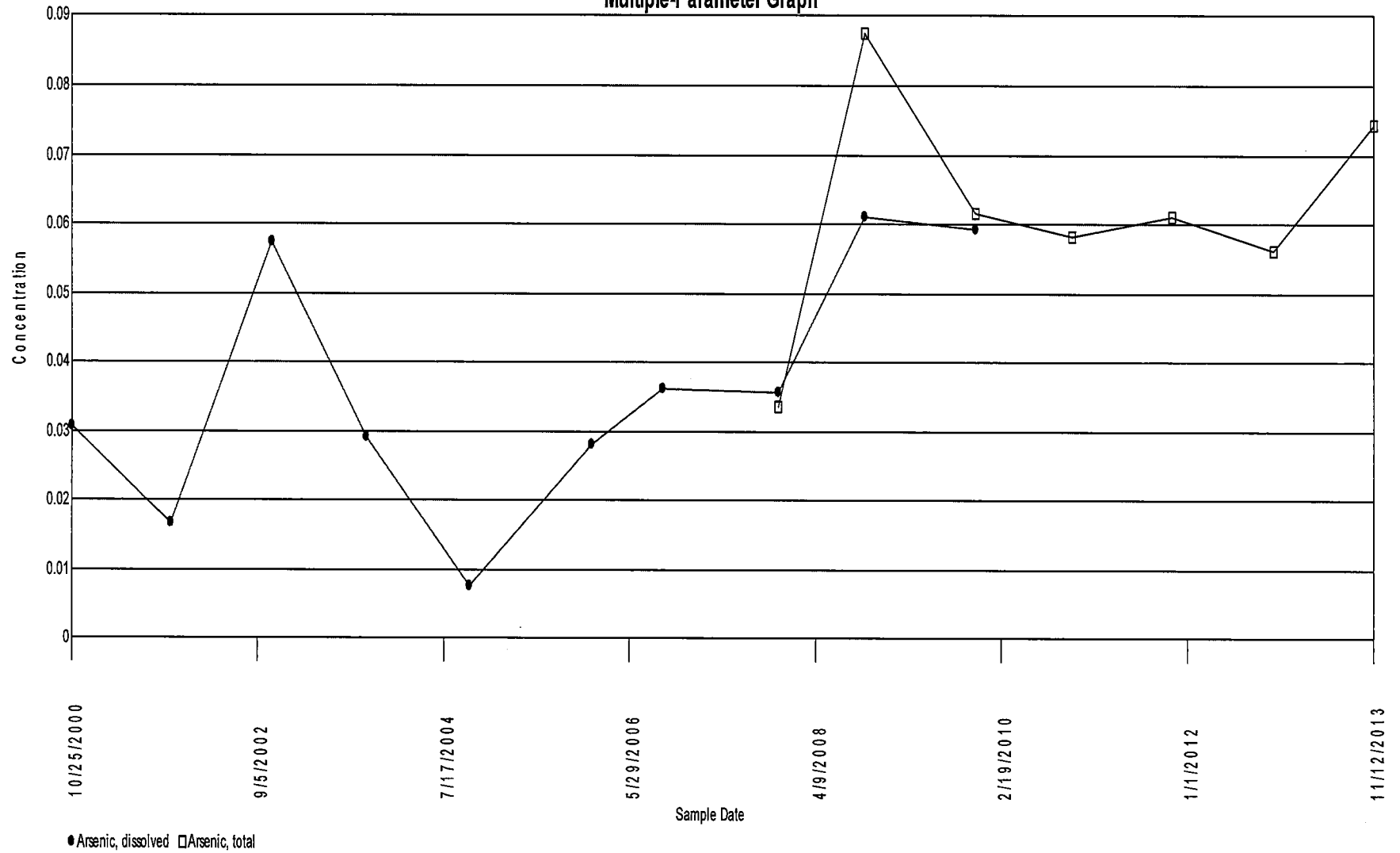
MW08SB

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW15SB

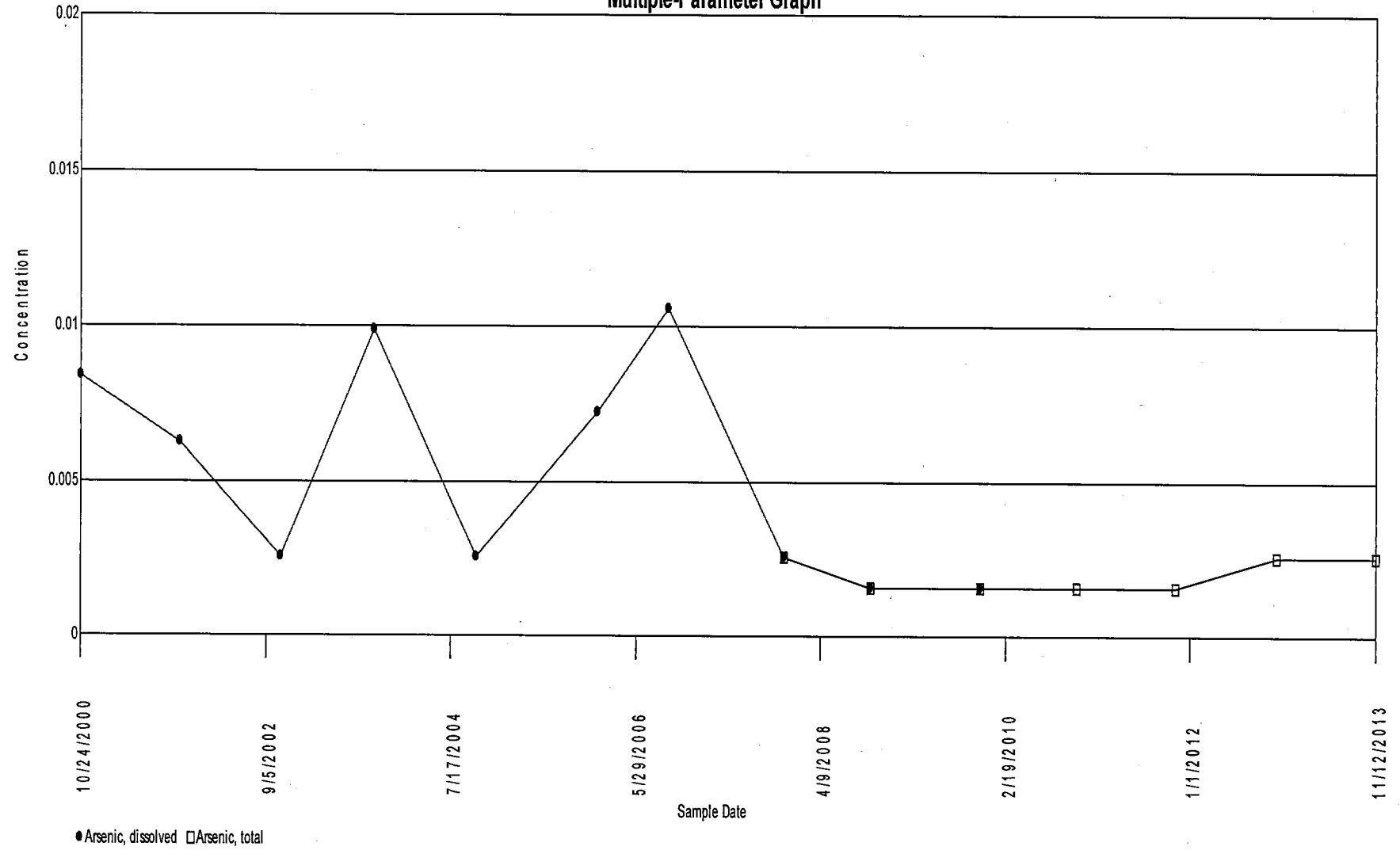
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW16SB

Multiple-Parameter Graph

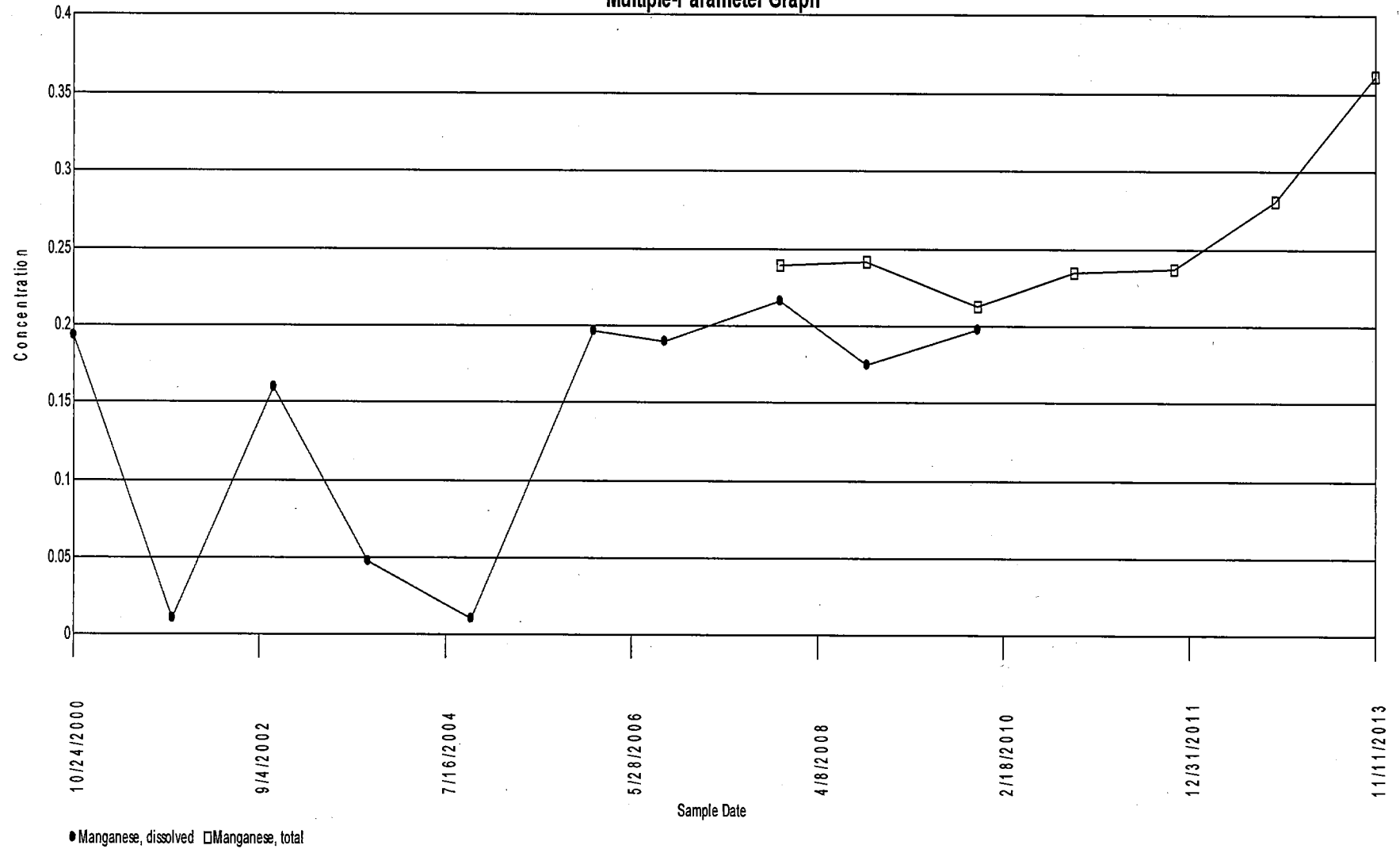


MANGANESE

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW02SB

Multiple-Parameter Graph



Multiple-Parameter Graph

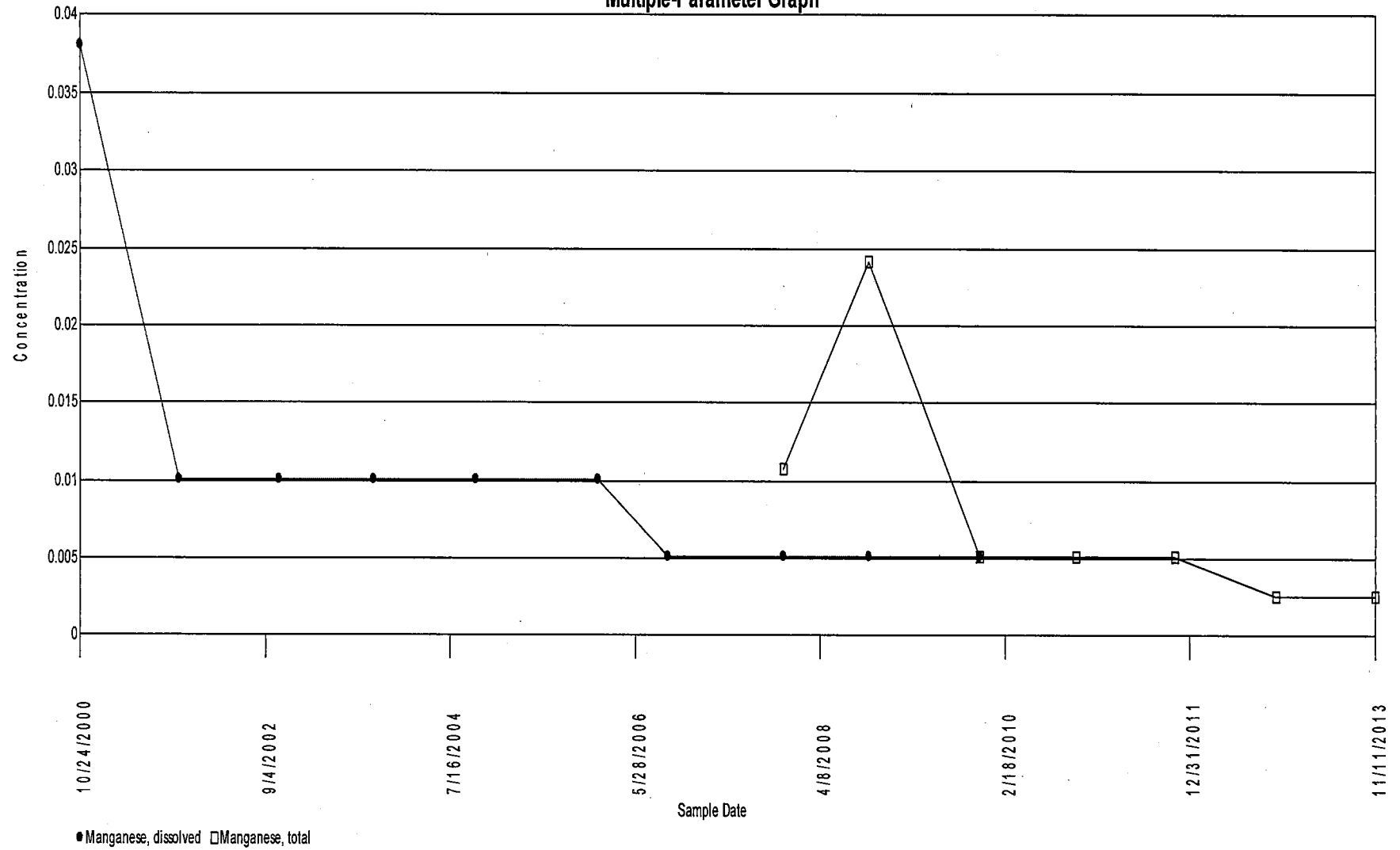
MW02SB

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW02SG

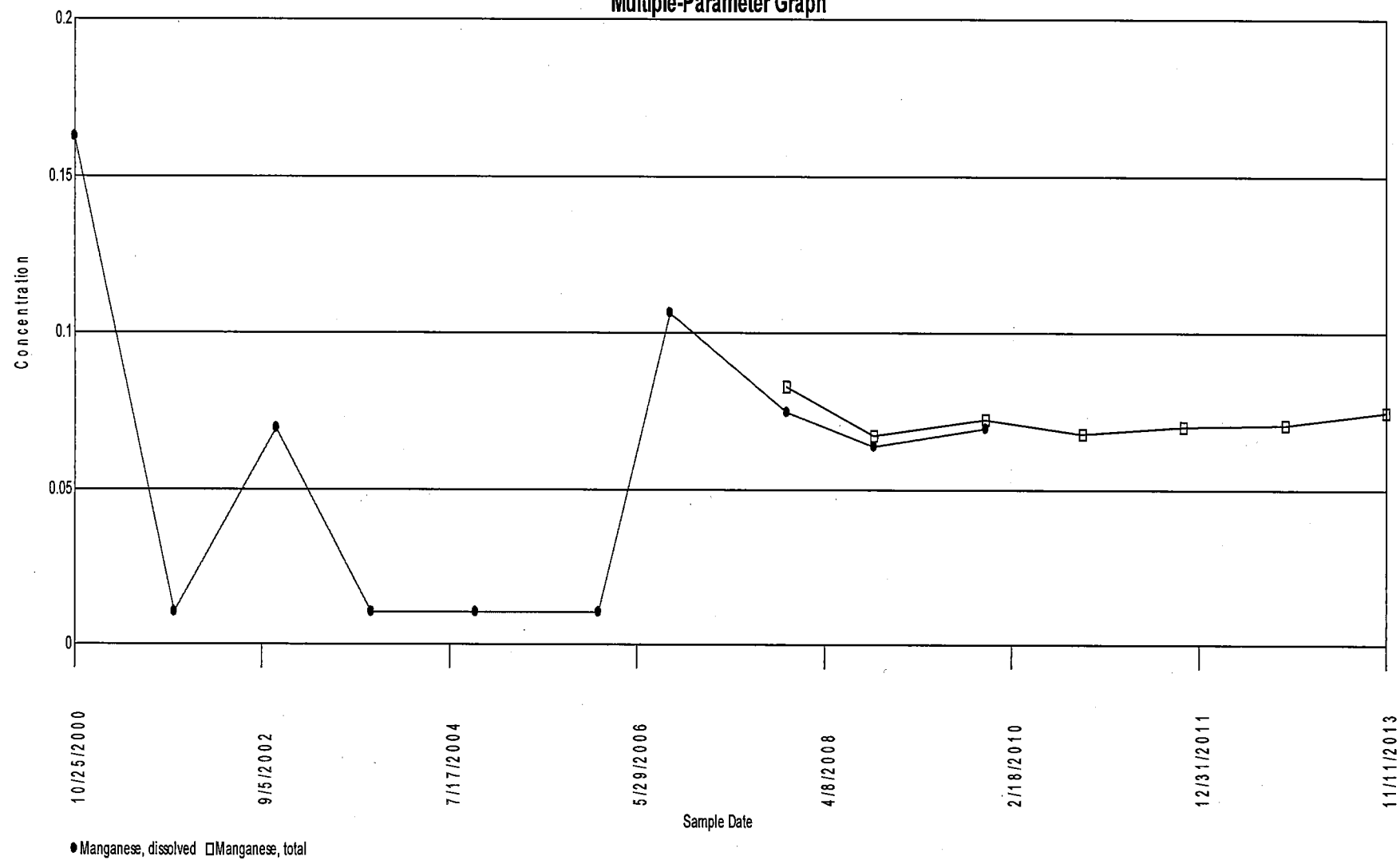
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW03SBA

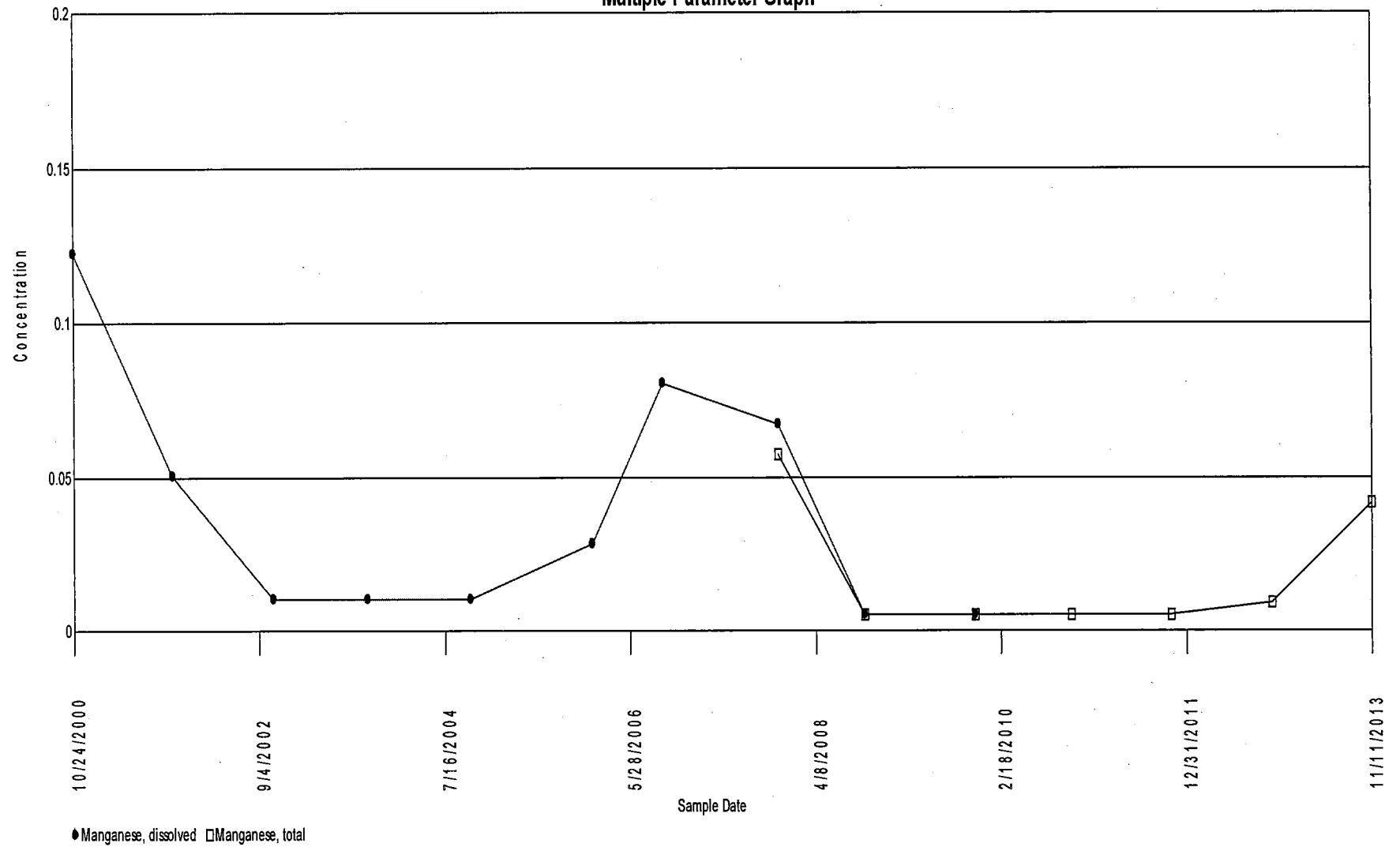
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW04SB

Multiple-Parameter Graph



Multiple-Parameter Graph

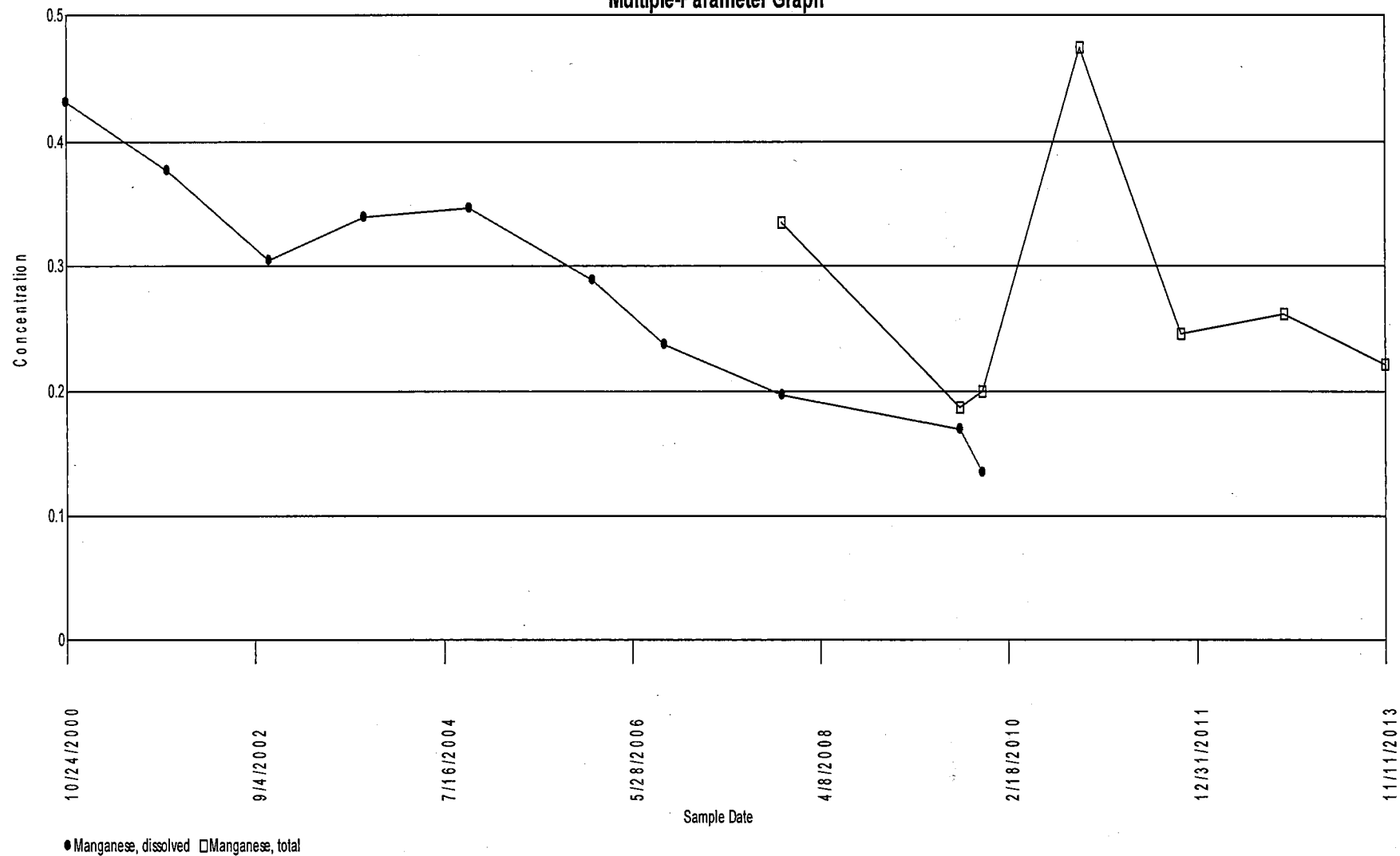
MW04SB

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW04SG

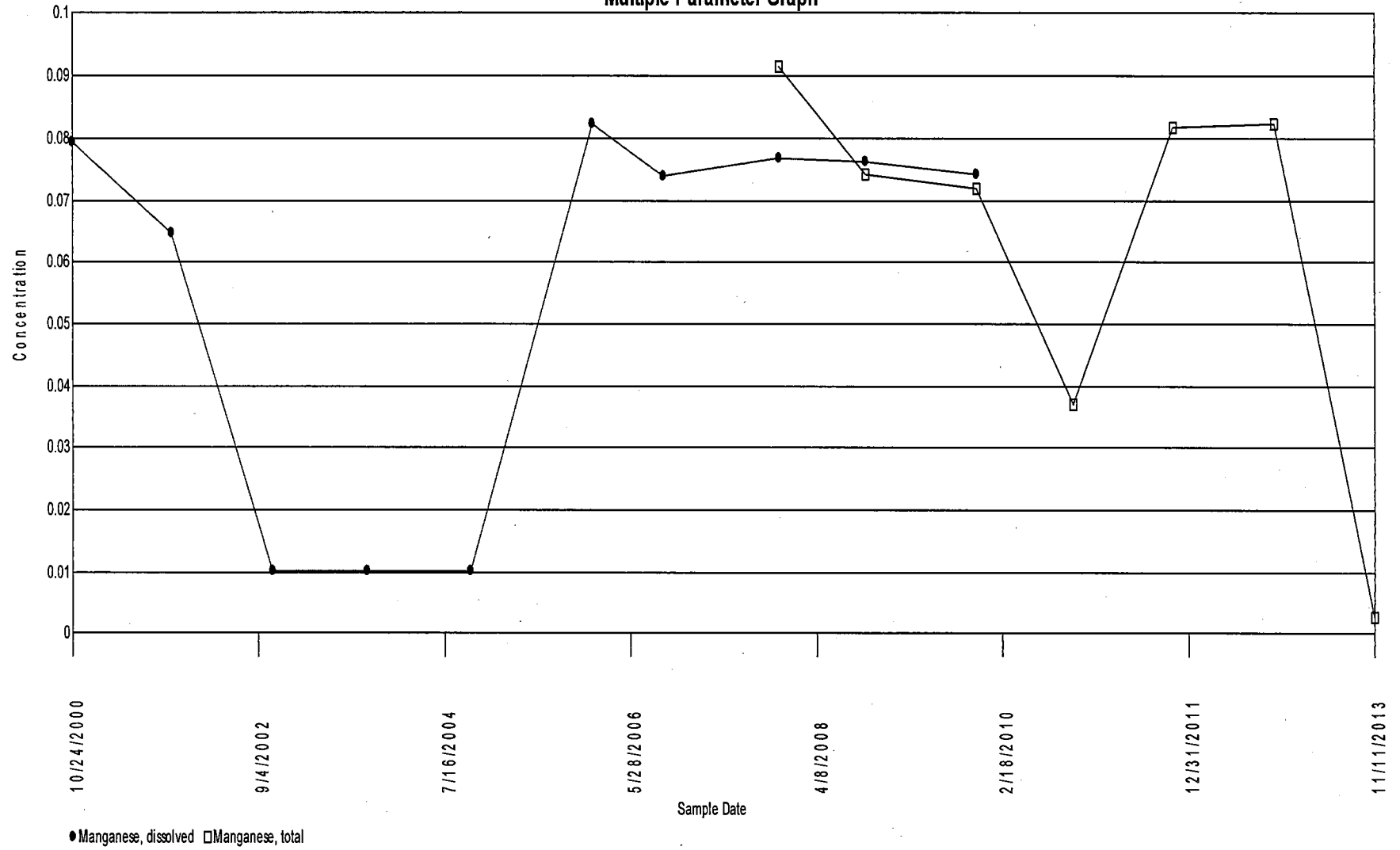
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW05SB

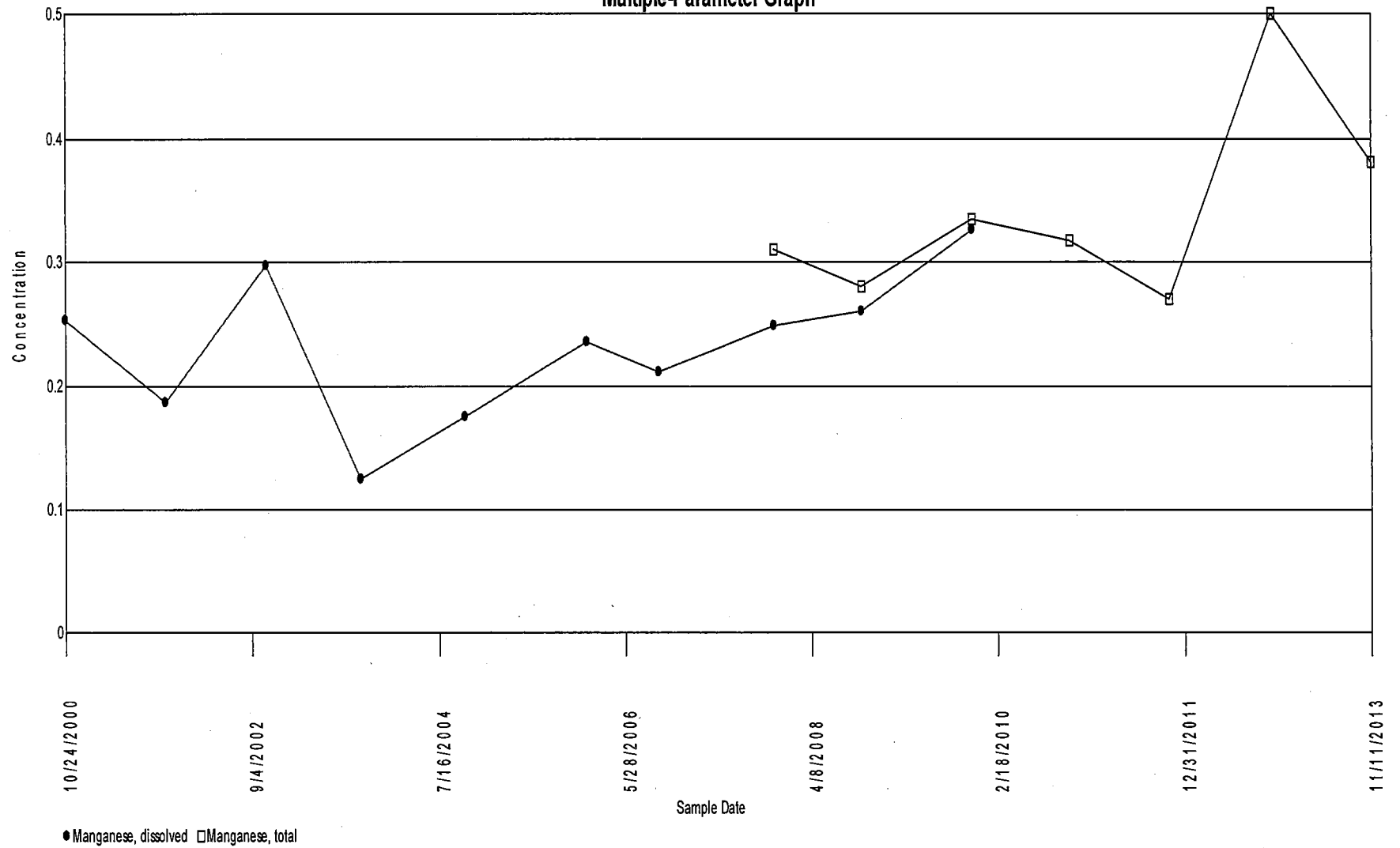
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW05SG

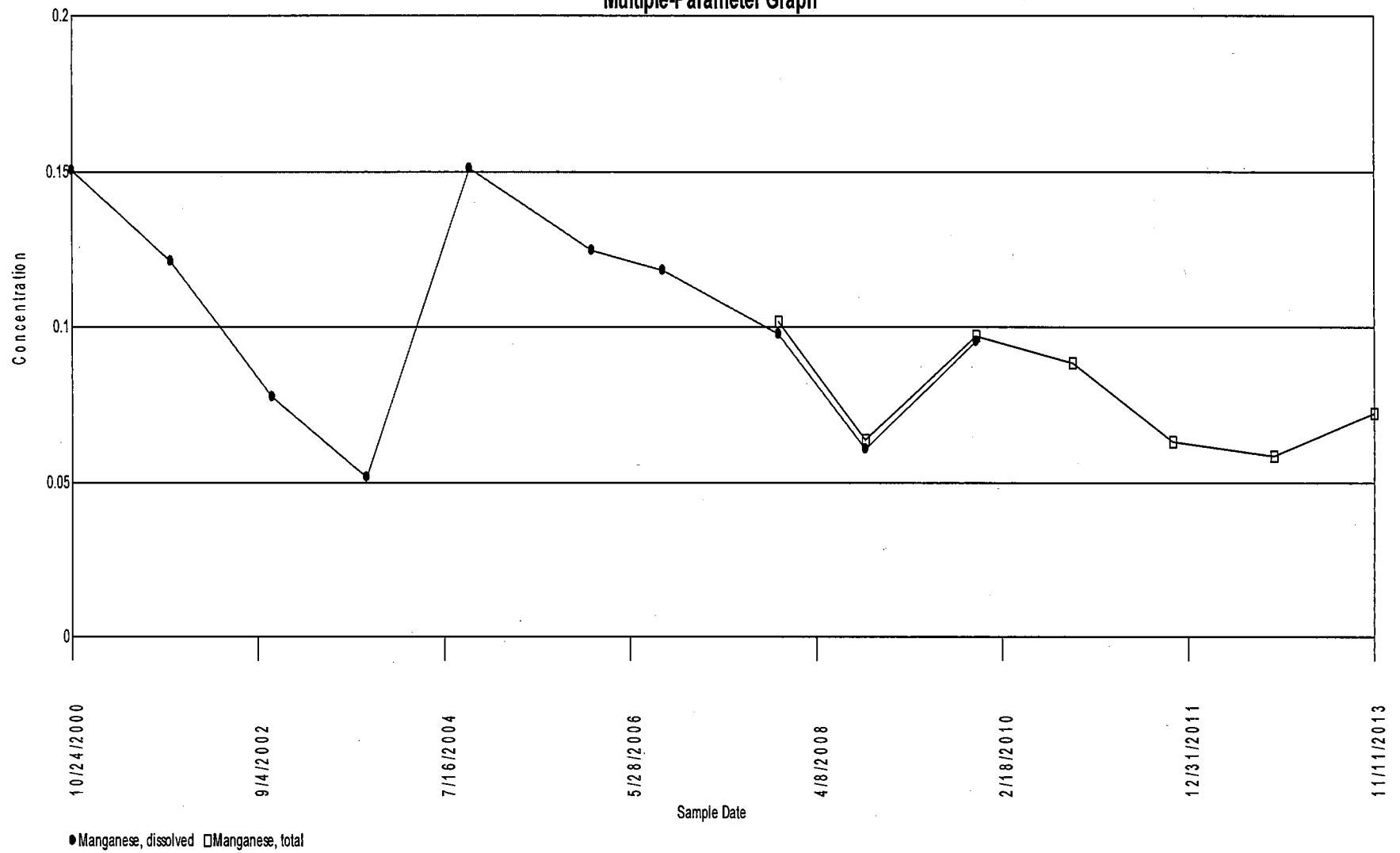
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW06SB

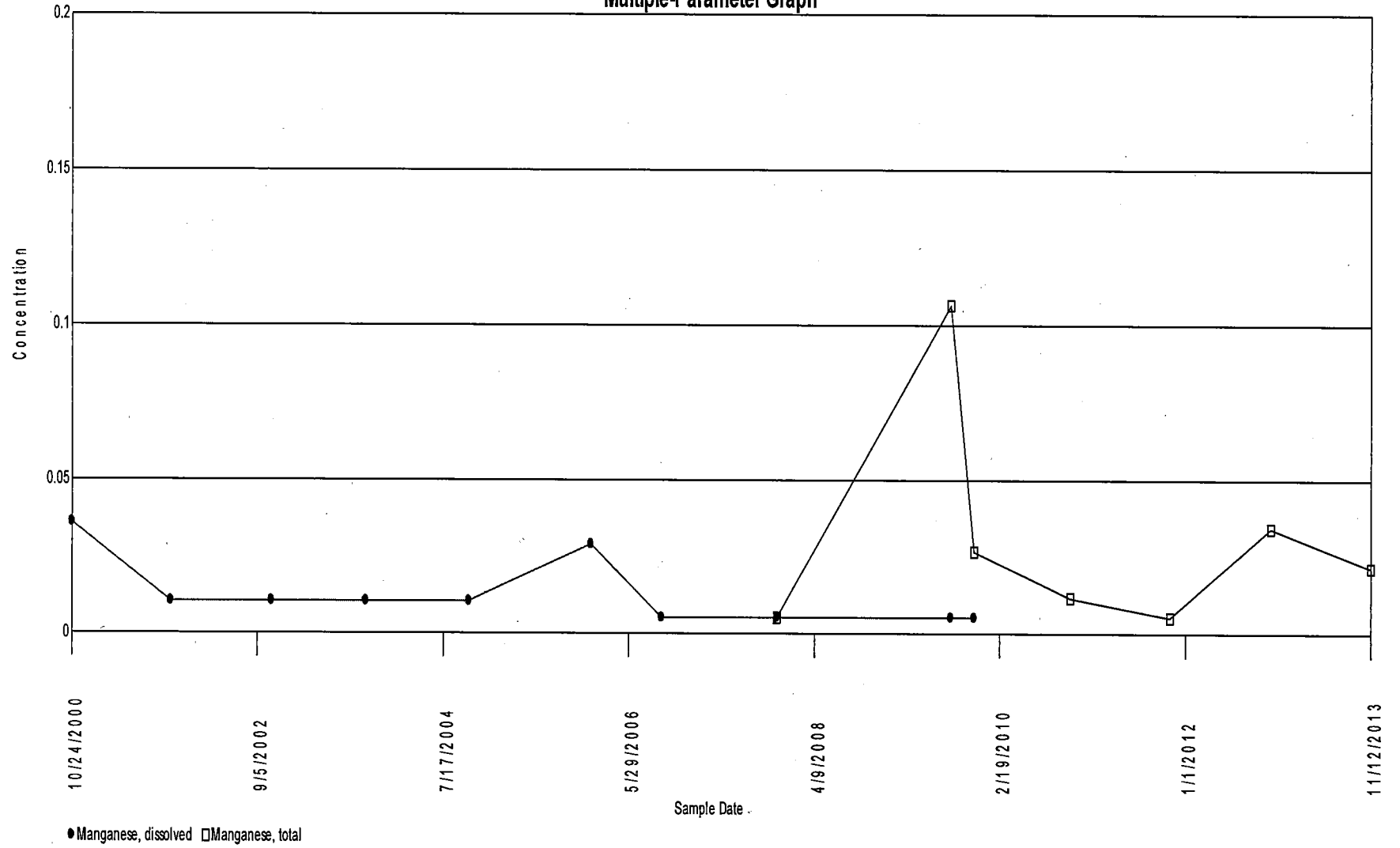
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW07SB

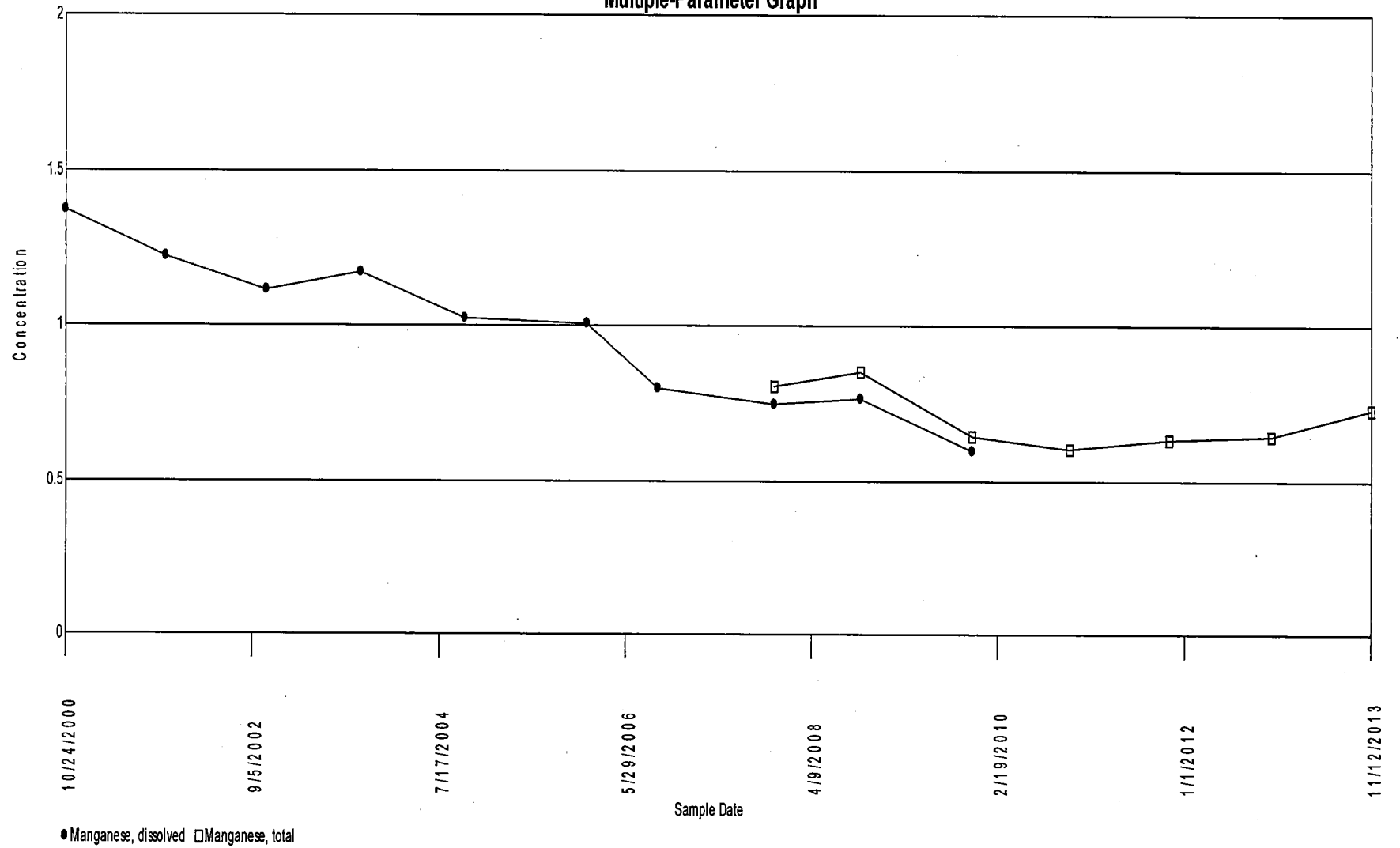
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW07SG

Multiple-Parameter Graph



Multiple-Parameter Graph

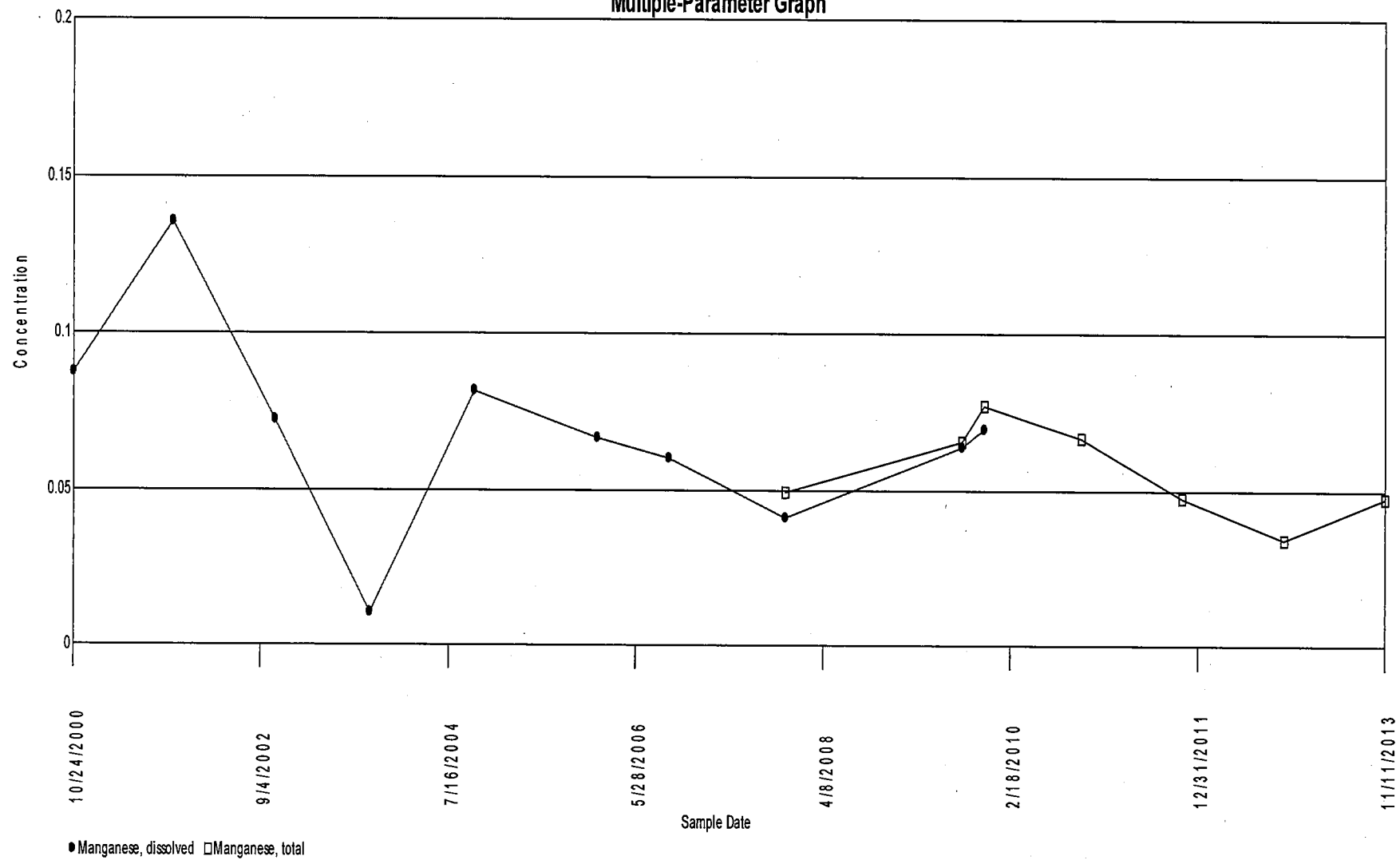
MW07SG

Multiple Parameters

ALBION-SHERIDAN TOWNSHIP LANDFILL

MW08SB

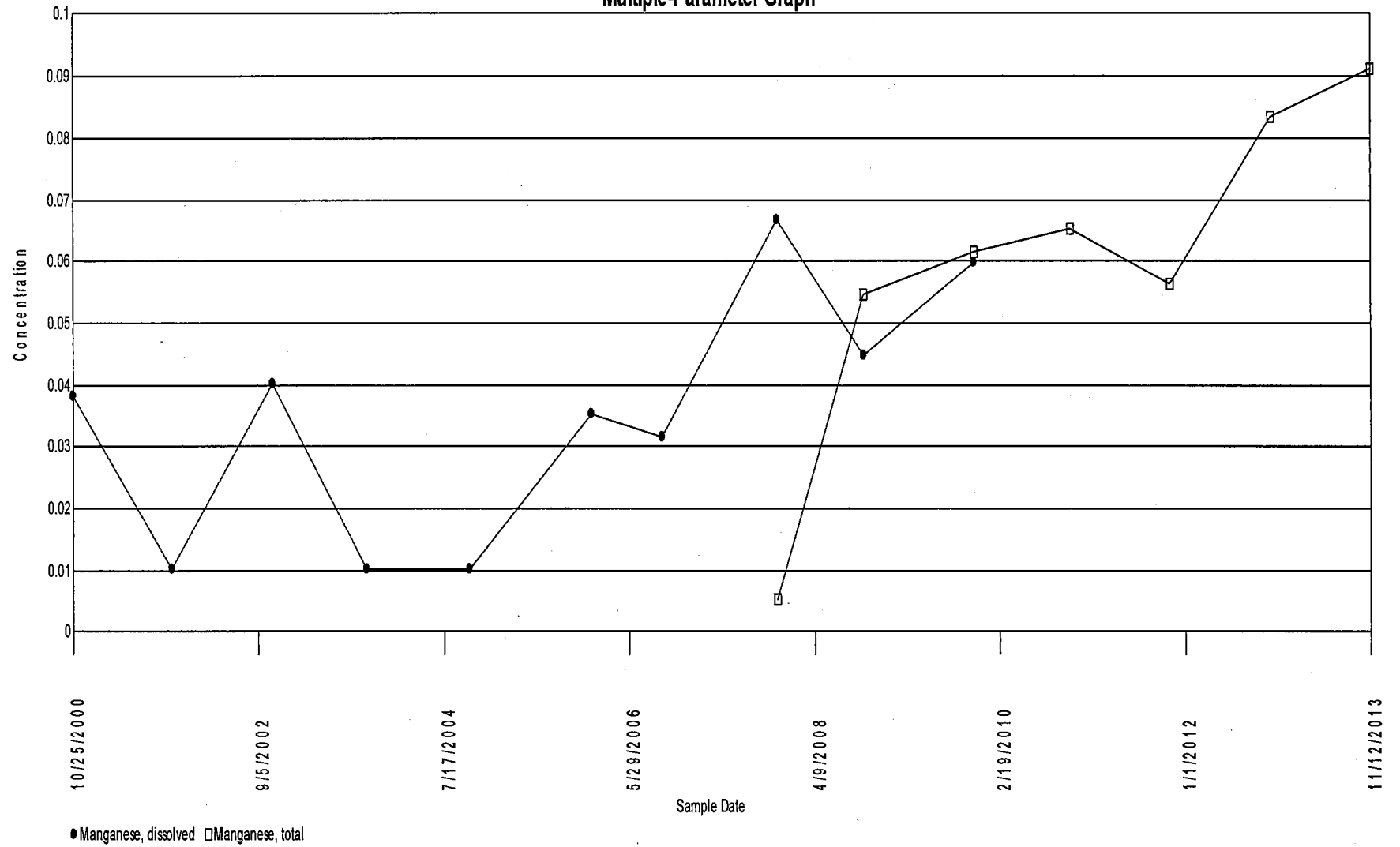
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW09DB

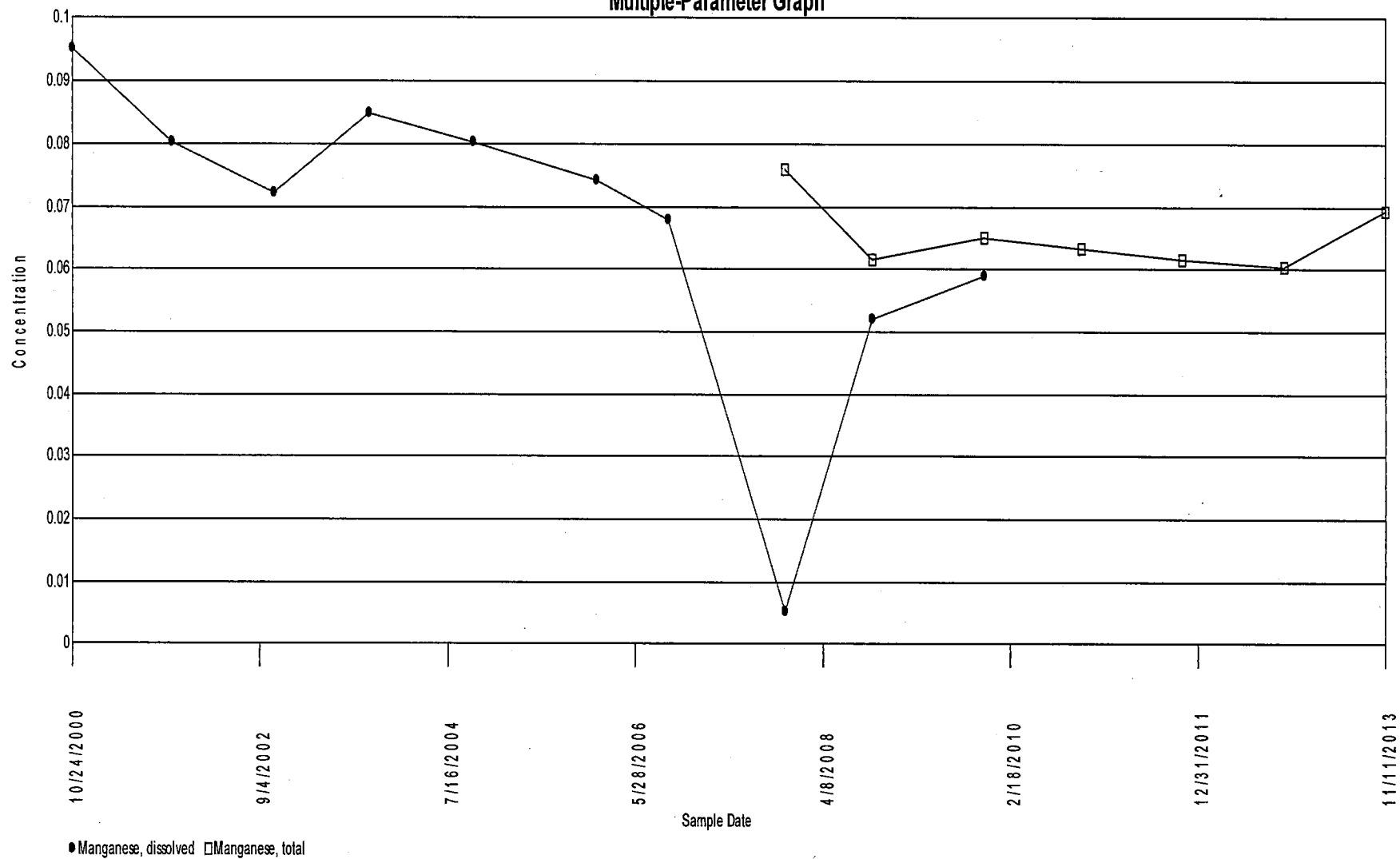
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

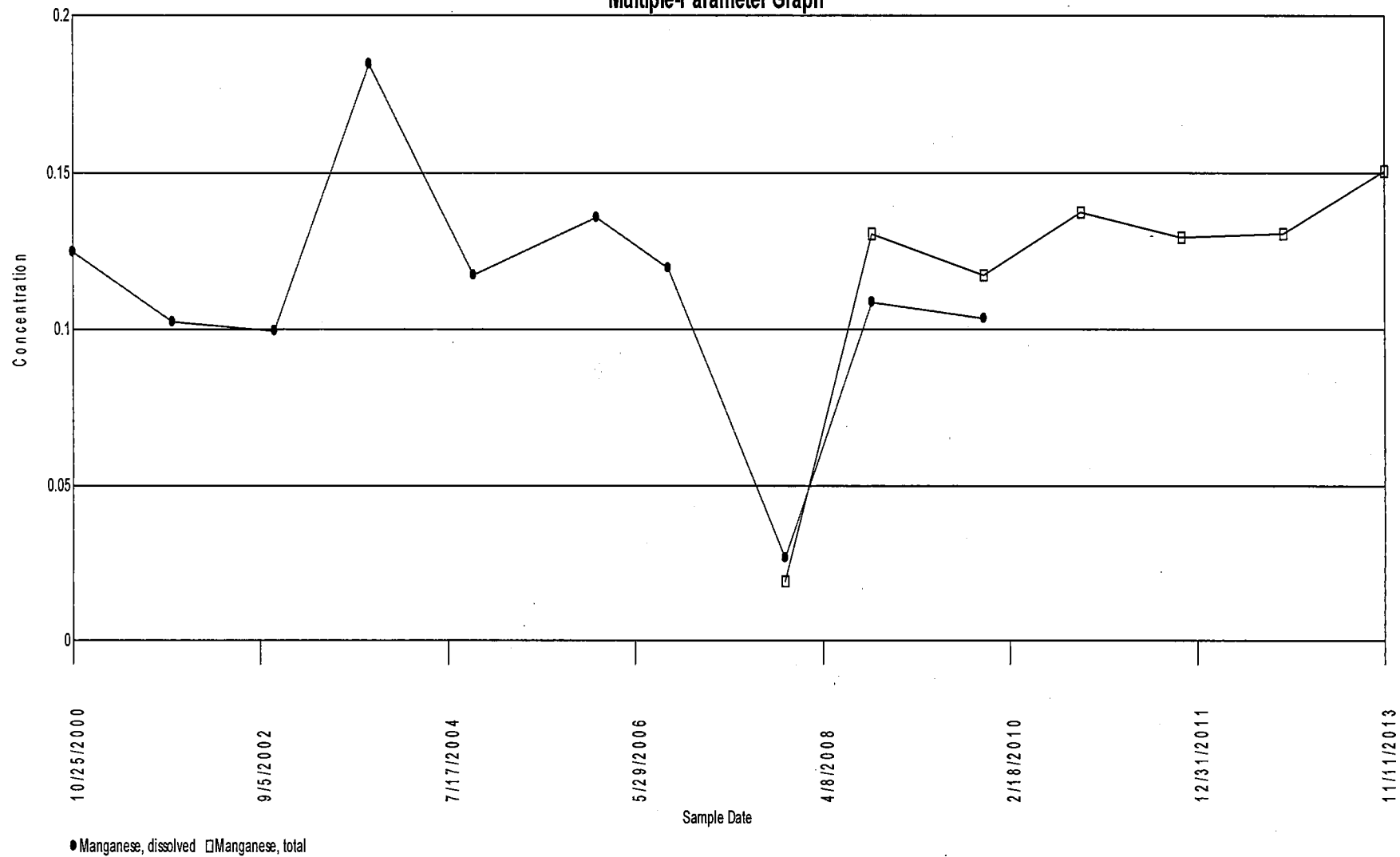
MW09SB

Multiple-Parameter Graph



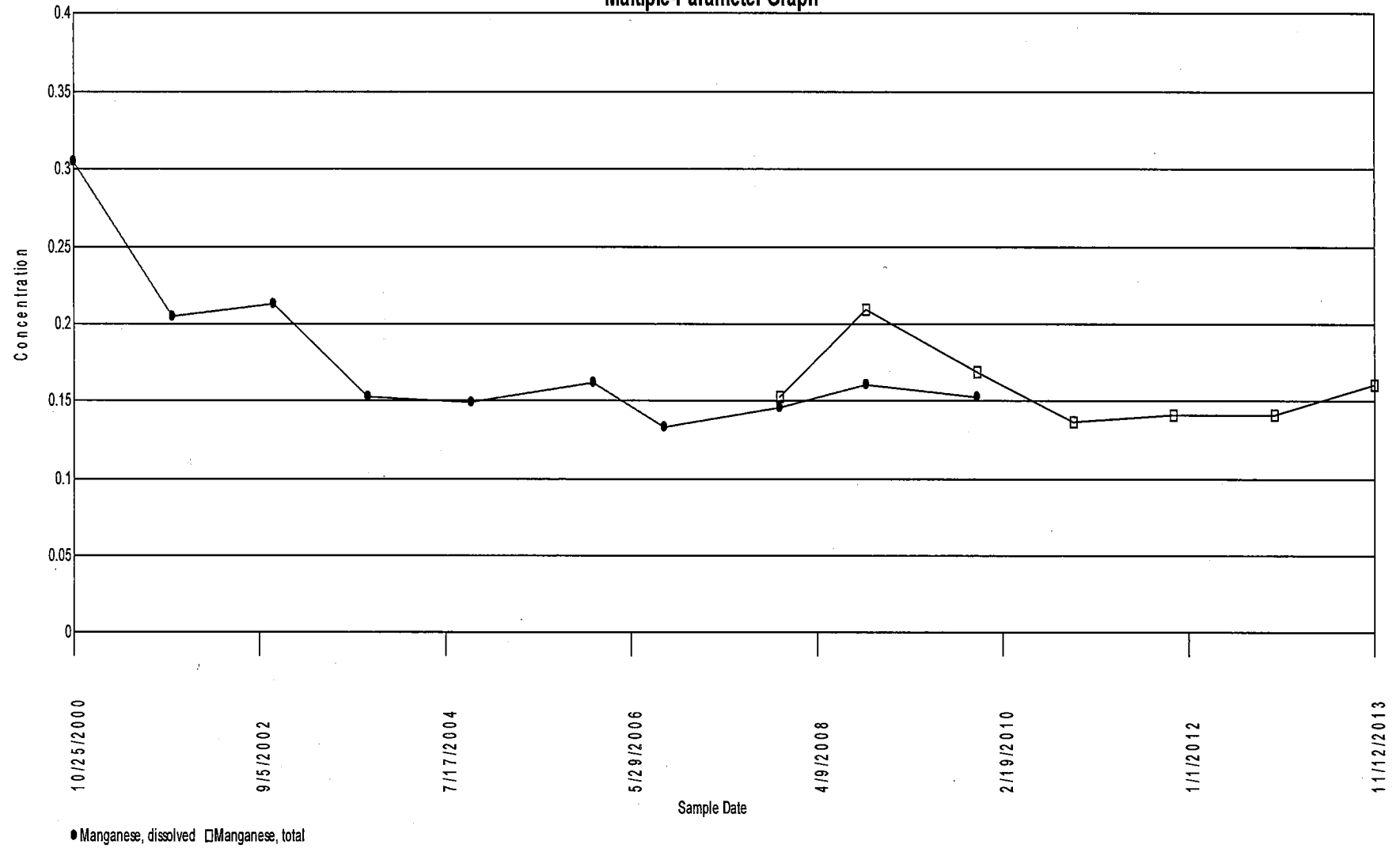
ALBION-SHERIDAN TOWNSHIP LANDFILL

MW10SG
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

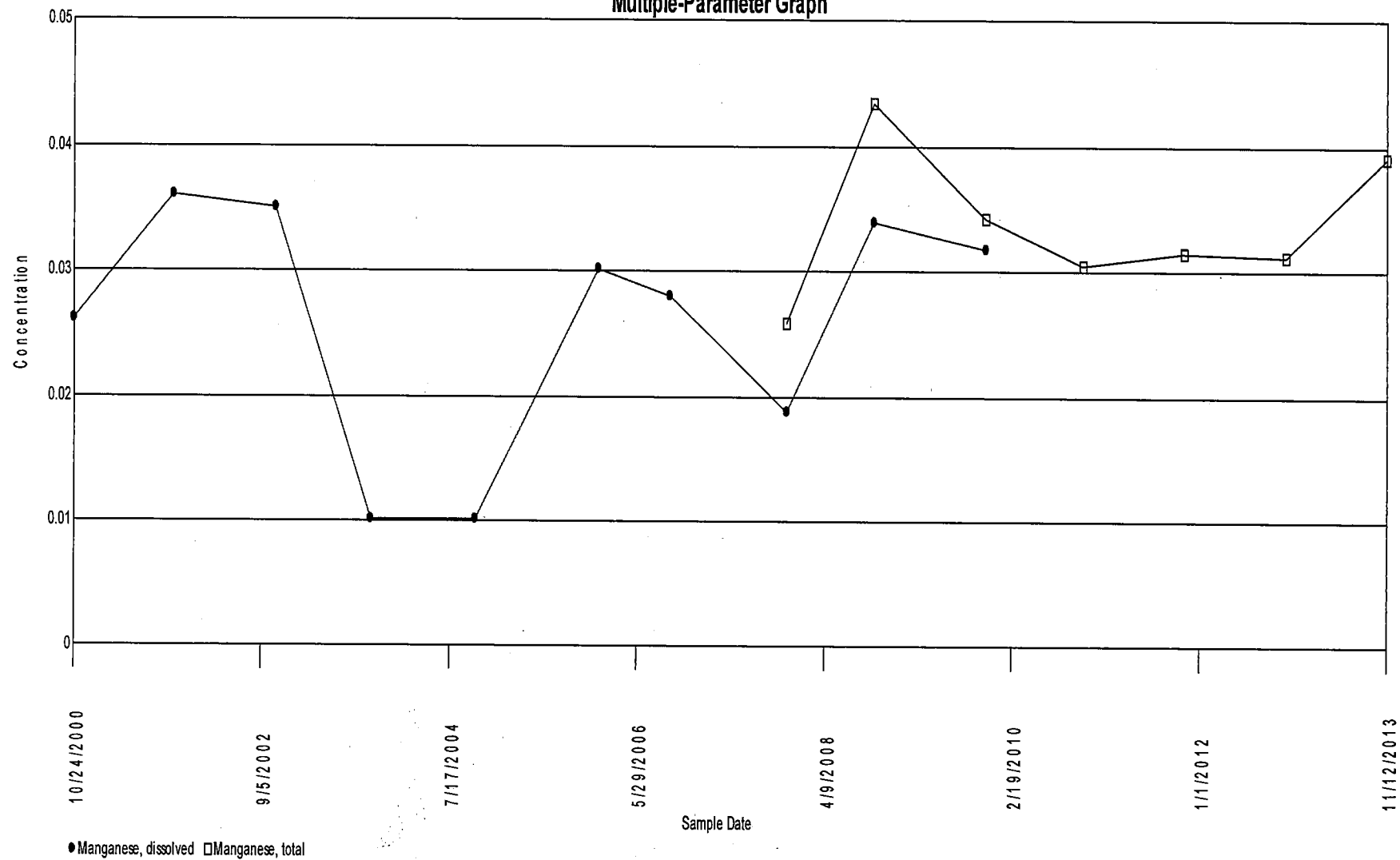
MW15SB
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW16DB

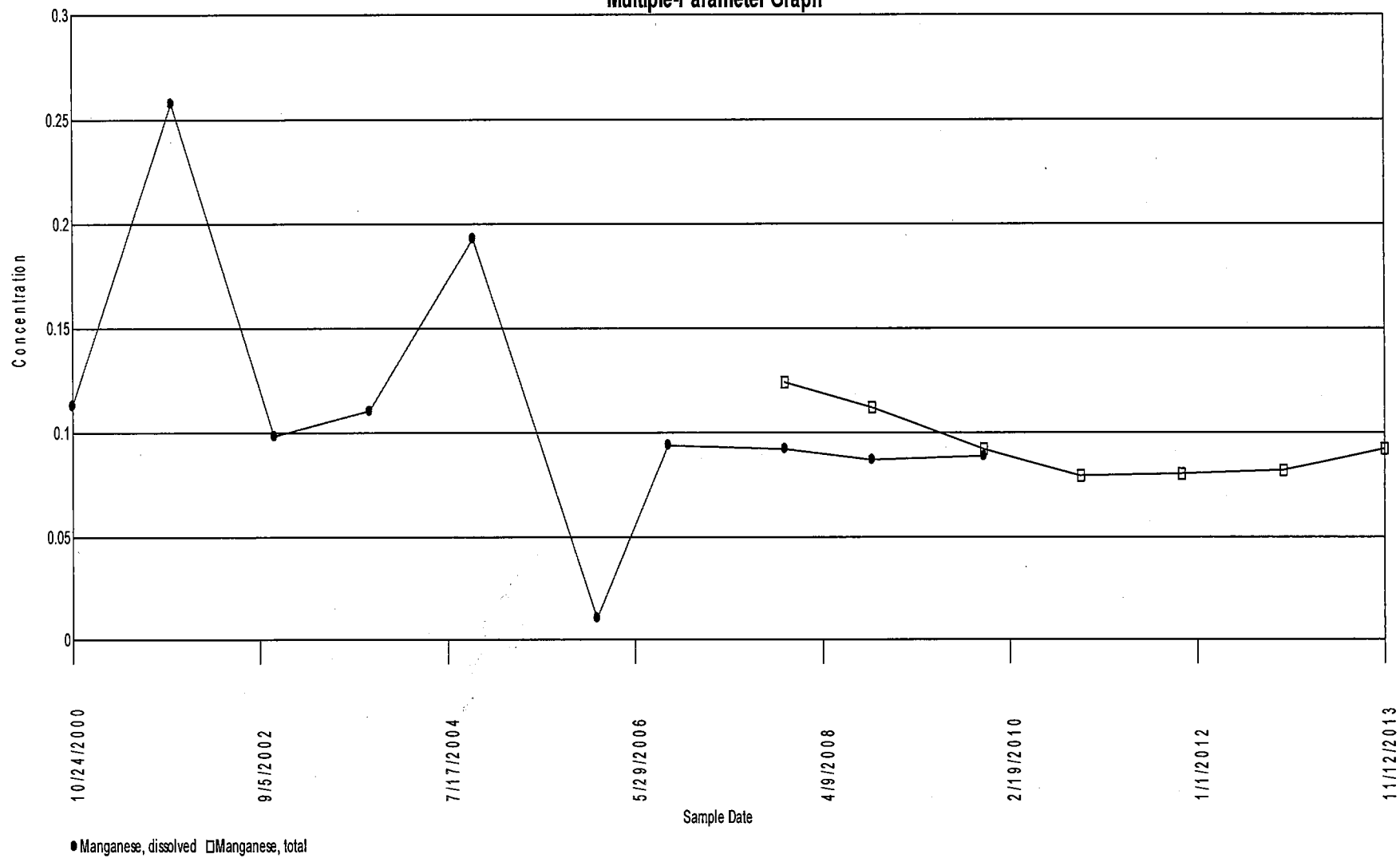
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW16SB

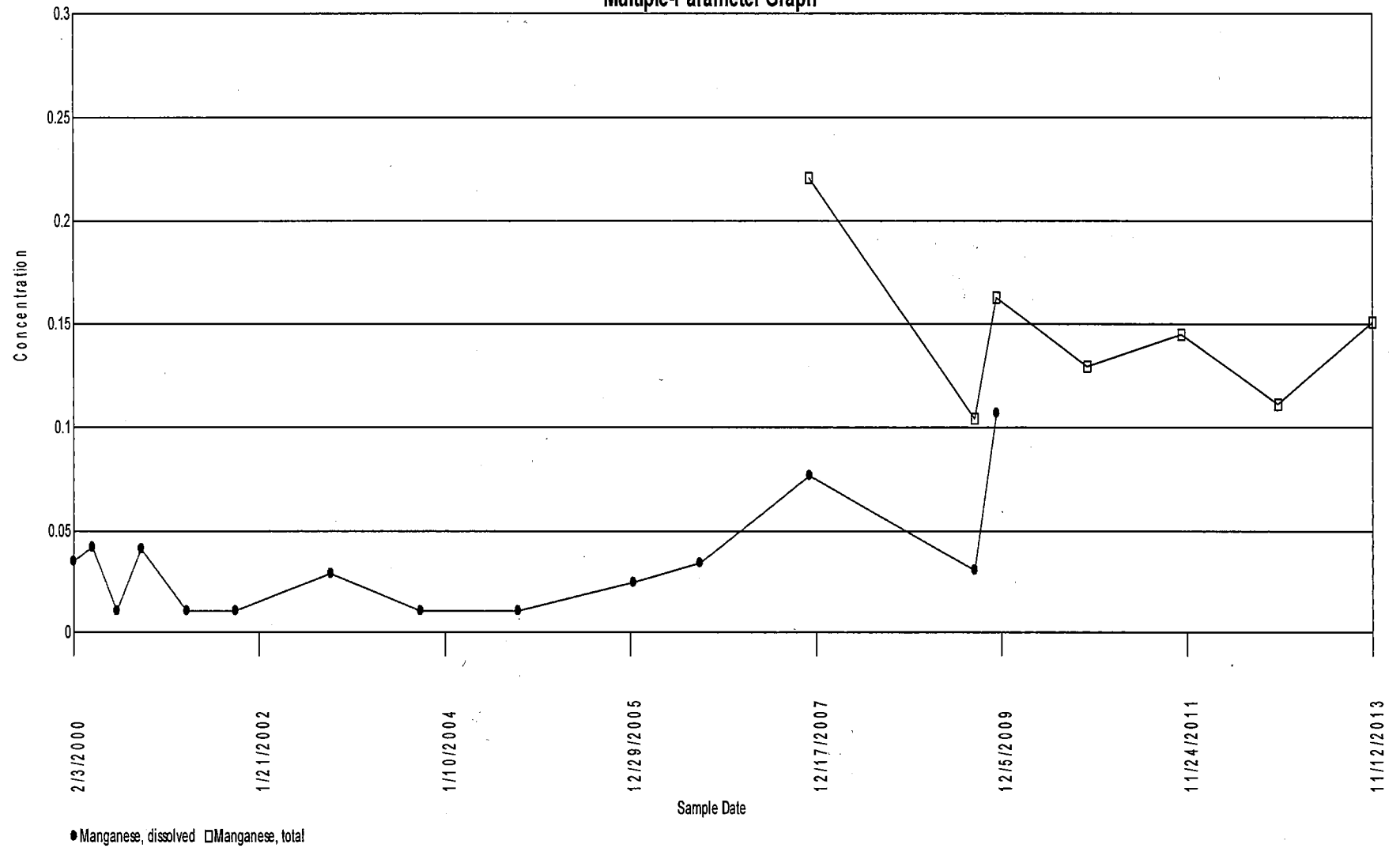
Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

MW17B (RW07)

Multiple-Parameter Graph



ALBION-SHERIDAN TOWNSHIP LANDFILL

RW04

Multiple-Parameter Graph

